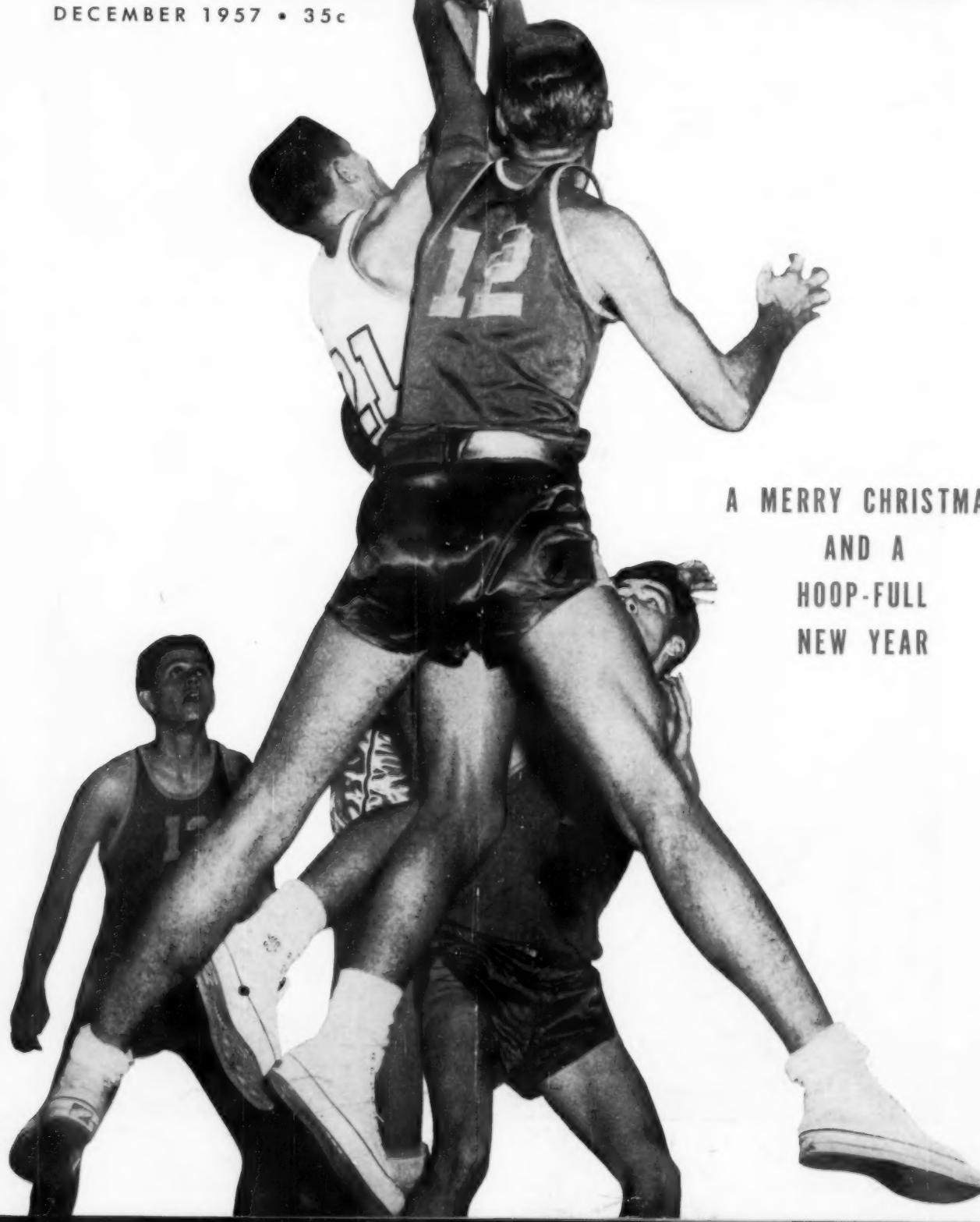


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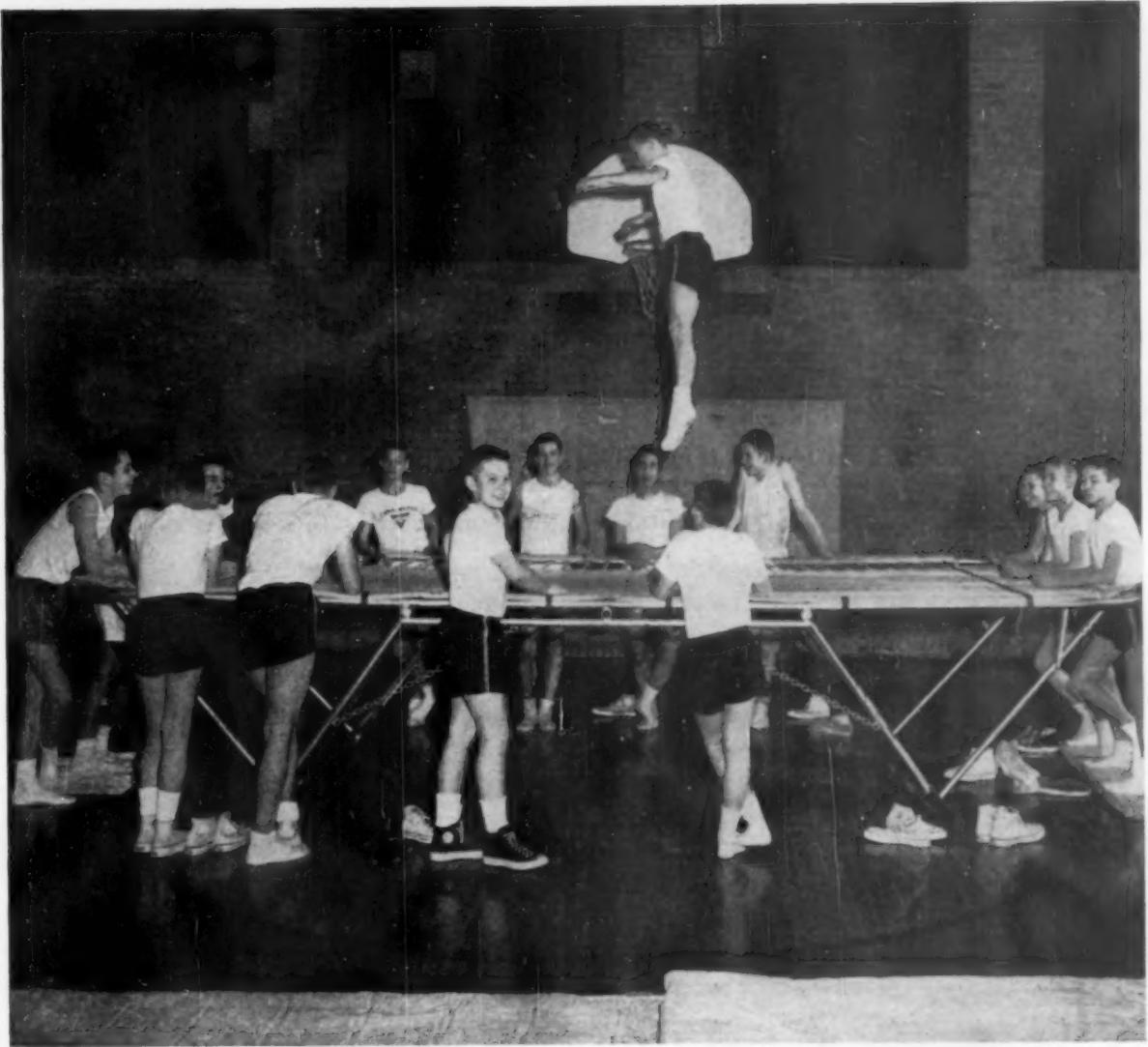
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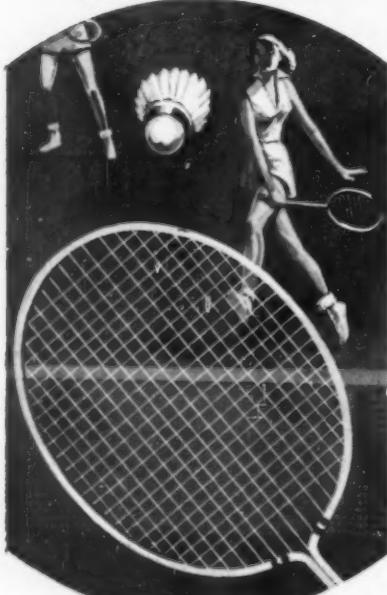
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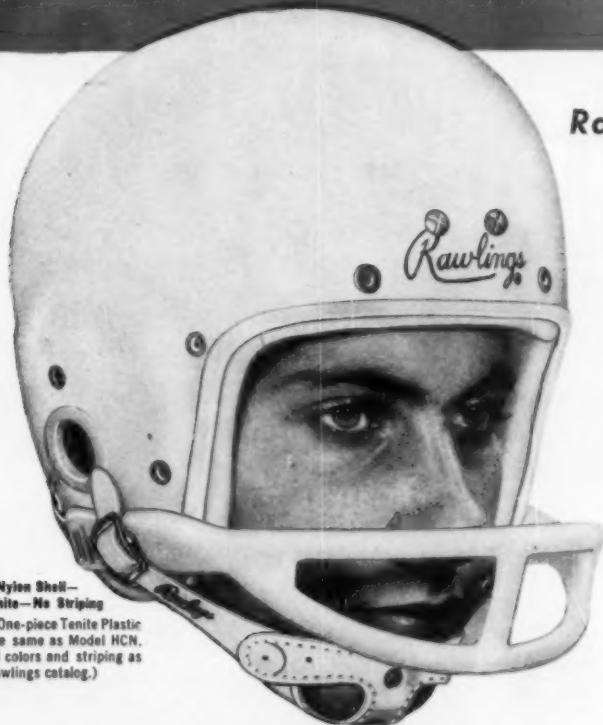
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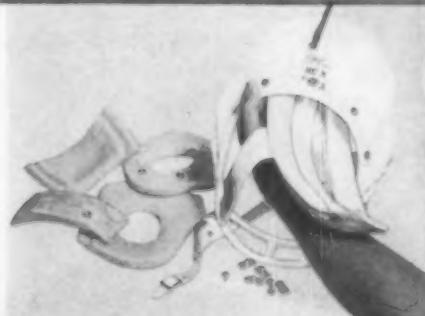
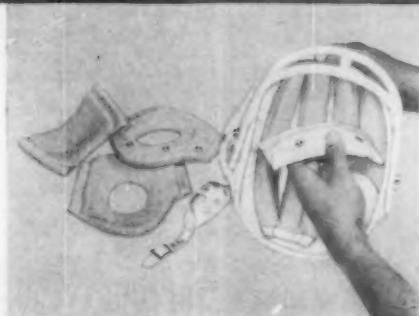
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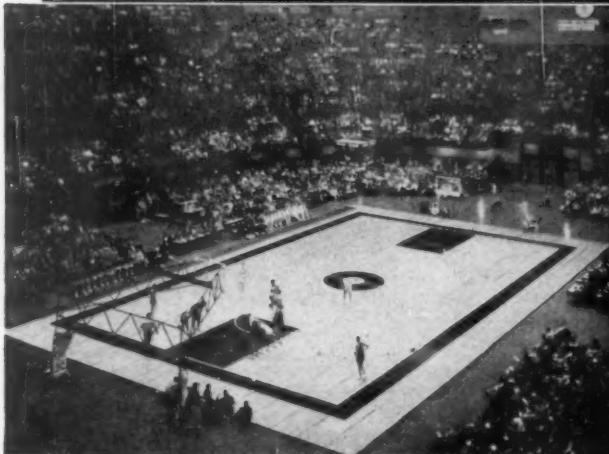




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Pitches inside and outside

PARDON us, fellows, but will one of you high-domed pigskin professors enlighten ignorant little us on this "ball-control" business?

Everywhere we go, we hear coaches expound gravely on this or that "ball-control" offense. Listen to your favorite telecaster doing a football game and we'll betcha that everytime a team runs the ball for a couple of first downs, he'll smugly inform you that they're playing a "ball-control" offense.

No, we're not exactly knuckleheads. We know that ball-control is supposed to mean precisely that—holding on to the ball as long as you can, grinding out the yardage without any undue risks.

But what's so new about that? Except for that comparatively brief spell when the Southwest was tossing the ball all over the lot, that's been the idea of the game all along. What team DOESN'T hold on to the ball as long as it can? What team wouldn't, if it could, grind out four or five yards at a time?

But that's a whole lot easier said than done. If you haven't got the horses—if you can't consistently make ten yards on your first three downs—how do you manage to control the ball? Do you keep grinding out seven or eight yards and then kick?

It seems to us that if you have a good enough club to make 10 yards on every three tries, you have a good enough club to keep going for the long gainer.

The grind-out game has several big flaws in it (we believe). For one thing, it's awfully fatiguing if you haven't real depth in both the line and backfield. And, second, you can't afford to make a mistake. It renders null and void a lot of back-breaking effort.

After all, most defenses are willing to give you the 2 or 3 yards—while waiting for you to make a mistake. And if you're geared to make tds on anywhere from 10 to 17

rushes, you're extremely likely to err somewhere along the line. That's why so many grind-out attacks tend to stall in pay-dirt territory.

Maybe we're talking out of the top of our helmet. If so, we'd appreciate having someone batten down our hatches.

MOST football coaches are pretty generous joes who are always quick to give credit where credit is due. Take Woody Hayes, for instance. In his new book, *Football at Ohio State*, he pays an awfully nice tribute to the fellows who taught him his ABT's.

He singles out the high school coach he worked under, the Denison U. staff, the clinic lectures of Frank Leahy and Paul Brown, the exchange of views he enjoys with Murray Warmath, the Georgia Tech coaches who taught him the belly series, and the Oklahoma and Maryland men who initiated him into the split T.

The length of an acknowledgment isn't necessarily an index to its character. The fact that it may run longer than Wilt Chamberlain's arm doesn't mean that the author is loaded with humility. It's the way that the acknowledgment is coached that counts, and Woody's words—it seems to us—glow with sincerity and just plain niceness.

THOUGH spectacles like the Olympics and Davis Cup play have their place in the sports sun, they're no great instruments of international peace and brotherhood. The pressures are simply too enormous to create a climate in which Kid Cupid can function.

And yet sports possess a great potential for promoting international amity—as our State Department has so acutely perceived. It has discovered that small teams of American athletes and coaches, either com-

peting against local talent or operating intensive instructional clinics, are wildly popular throughout the world.

The reason is simple enough. Whereas the super spectacle is pressure-packed and impersonal, the informal little-team or clinic affair enables the sports-hungry natives to get closer to our athletes and absorb our famous know-how. Coaches and athletes returning from such junkets rhapsodize about their experiences, and it's conceivable that they've done as much good for America as any Marshall Plan handout.

The tiny track team we sent to Bucharest, Rumania, several months ago serves as a perfect example. The Rumanians somehow went for big, cheerful Parry O'Brien—the prototype of the American athlete—and wildly cheered his triumphs in the shot put and discus.

But the climactic moment came at twilight during the closing ceremony. As the tiny American team of three whites and three Negroes marched down the track, the American flag waving proudly above them, a spontaneous roar erupted from 50,000 throats:

"O'Brien! O'Brien! SUA! SUA!"
(SUA means United States.)

That, friends, is the kind of public relations that money can't buy. How else but through sports could you wave Old Glory behind the Iron Curtain? And how else could you get a Rumanian crowd to yell SUA and a fine old name like O'Brien?

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(Concluded on page 47)



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THE FIRST LESSON IN POLE VAULTING

By BROTHER G. LUKE

Track Coach, West Philadelphia (Pa.)
Catholic High School

IT'S generally agreed that the pole vault is the most difficult field event to learn and consequently to teach. It has been estimated that the vaulter must master some 41 different motions in order to become proficient in his event. Yet the entire technique, when executed as one smooth unit by an accomplished vaulter, appears simple.

Both coach and athlete will soon recognize that this intricate event requires much time and patience to learn, but its fascinating complexity presents a challenge and affords a great deal of satisfaction as progress is realized.

SELECTING POLE VAULTERS

It would prove somewhat impractical to try a large number of candidates in this event because of the time required and the necessity of attending to other events. Therefore, concentrate on the kids who seem to be well-coordinated and are fairly good all-around athletes.

The vaulter should have strong arms and shoulders and a strong mind as well. The intelligent, cooperative type is preferable. Add tallness and speed for a desirable combination. Since agility is also a great asset, divers and gymnasts often make good vaulters. Encourage them to try.

Select likely looking prospects, but do not exclude the enthusiastic pluggers who wish to try, even if they seem to lack some of the qualifications. Frequently an average boy can become a better-than-average vaulter through sheer per-

severance. Also, give special consideration to underclassmen, who will have several years to develop.

METHOD OF INSTRUCTION

Technical writers have proposed various methods of teaching beginners. Suggestions range from "Let them fool with the pole for a few days" to those concerned with the minutest details. There may be several possible methods, but experience has proved the following procedure most effective. Under this system many learners have been taught to clear six or seven feet with fair form within a half hour, and very few candidates have failed to learn the rudiments within a day or two at the most.

It's important to stress only one fundamental at a time when instructing beginners. Although the final aim must be a coordinated unit, it's almost impossible to teach or learn the many intricacies at one time.

Each element must be stressed separately, despite the fact that each element cannot always be performed separately in actuality. For example, the vaulter cannot omit the take-off in order to concentrate on the swing, but he can give his attention to learning the swing.

TEACHING BEGINNERS

It's assumed here that the vaulter is right-handed. The opposite hands, arms, and legs would naturally be involved for the left-hander.

1. **Handgrip:** The vaulter's right hand grips the pole about 9 feet from the front end, and his left, the lower hand, about 7 feet. Taller boys can hold a little higher; shorter boys, a little lower.

If the top hand is raised much higher than 9 feet, the learner's momentum will probably give out and he'll be left "hanging in the air." If the grip is much lower, he

(Continued on page 36)



Determined to cop a prize in the Scholastic-Ansco Photography contest some years ago, Larry Schiller, a crack LaJolla (Cal.) H. S. shutterbug, repaired to the school athletic field and shot this photo of one of LaJolla's young vaulters. The picture won a prize, it appeared as a Scholastic Coach cover (March 1956), Schiller went on to become a famous sports photographer, and the model . . . well, he became a little famous, too. His name—Bob Gutowski!

BY JACK RAMSAY

Head Coach, St. Joseph's College (Philadelphia)

A BALL

CONTROL

FREEZE

Once ball comes over mid-court, one side is overloaded and so—then screens away from the ball for the side man. Here, however, No. 14 feels that the pass would be risky because of the way guard No. 7 is overplaying No. 12. So . . .



No. 14 fakes the pass while back-court teammate No. 12 goes behind his guard and screens for corner man No. 5.



NEVITABLY during the course of a season your team will engage in a number of close, nerve-jangling games. The exact number may vary from year to year. At St. Joseph's College, we've found that about one out of every four games will be a squeaker.

These are the one, two, or three point games whose outcomes remain in doubt until the final horn. They're the games that make or break your season. If your team is successful in all or most of them, your season will be a good one. If the reverse is true, then your season will be disappointing.

PLANNED OFFENSIVE ATTACK

While a few of these games may be won or lost on freak desperation shots, the outcome of the heavy majority of them will be determined by the offensive maneuvering of the team in the lead in the waning minutes.

It's imperative, therefore, to have a planned offensive attack for those situations in which you have the slim lead, and a defensive attack for those in which you're trailing. This article is concerned with the former situation.

We've used an offensive attack for the past two seasons which, we feel, has helped us whenever we've entered the closing moments with a slight advantage. During this two-year period, we engaged in 15 such contests and, through the use of this pattern and the benevolence of the Almighty, came up with 13 victories.

Our pattern is based on three fundamental principles. First is that the offense must be an attack, not merely a stalling technique to hold the ball. An "attack" puts constant pressure on the defense with the threat of the possible score, so that if the defense gambles too freely, the lead will be increased.

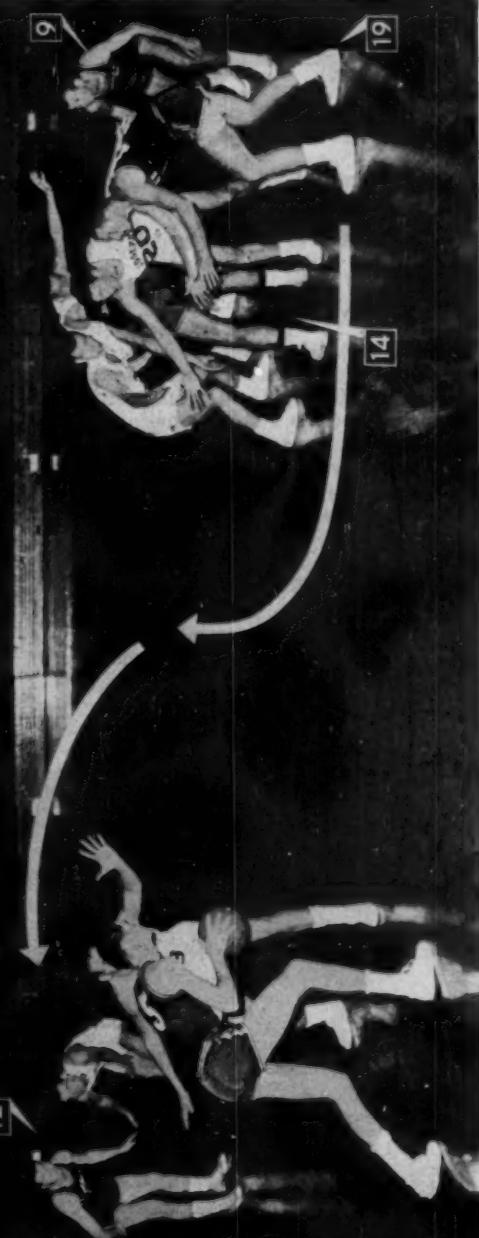
The second principle is that the offense must move in a manner that will prevent the defense from "doubling up" or "two-timing" the man with the ball. If this defensive maneuver is rendered null and void, much of the danger is removed from the tense, closing moments when your team is protecting that precious, narrow advantage.

The third essential is that all the players must be poised, confident, and skillful ball-handlers.

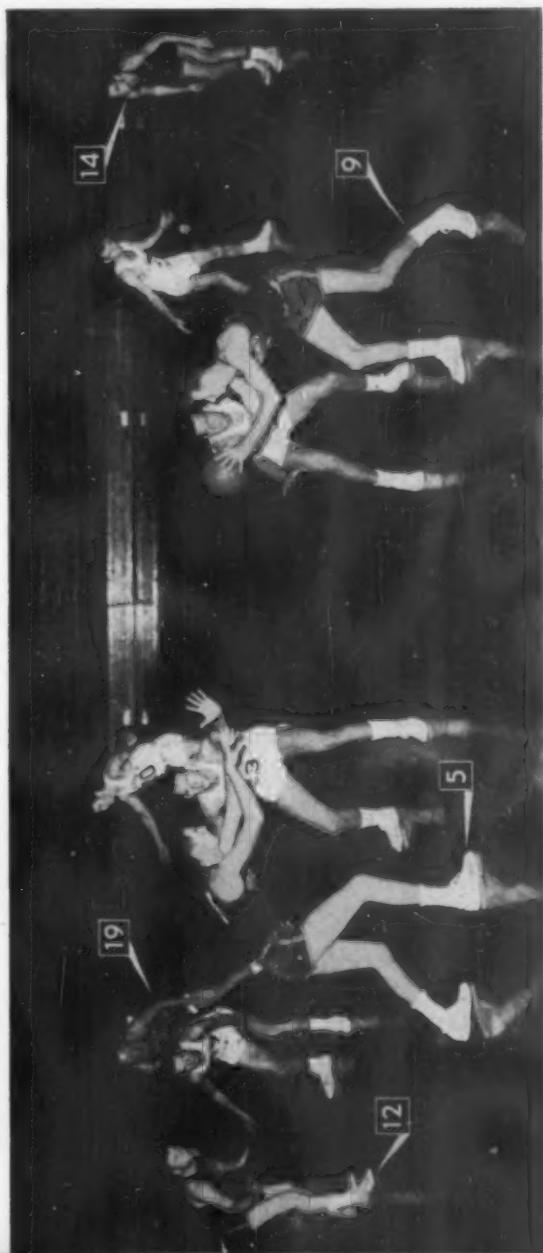
This may seem like a large order, but let's break it down and see how simple it can be. To develop the last named essential, we spend a lot of practice time on a team, full-court, one-on-one drill.

Players are matched according to approximate size and speed. The offensive man takes his tightly guarding defender

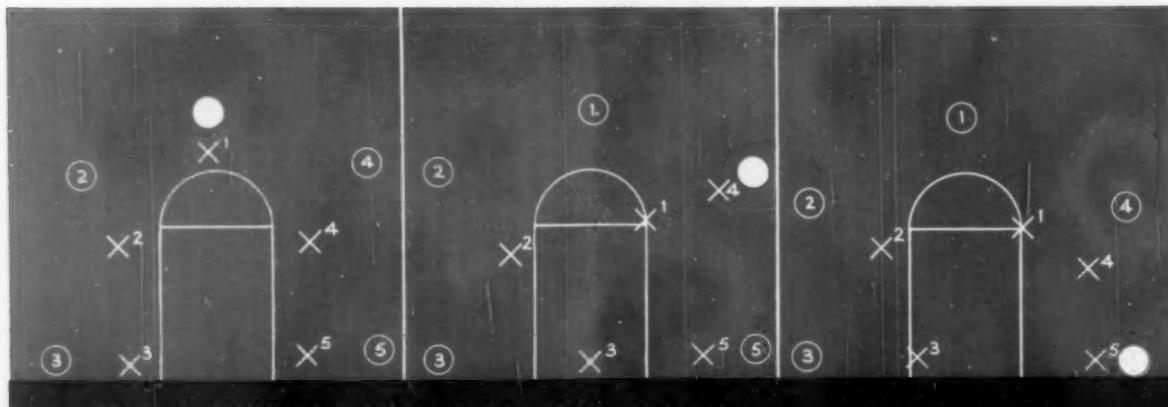
(Continued on page 28)



Corner man No. 5 receives pass from No. 14, who then moves away from the ball and screens for inside man No. 19. Latter runs his man into the screener and cuts across lane. If open, he gets pass from No. 5 for lay-up.



If defense recovers to prevent this play, No. 5 looks for to free himself for No. 5's pass. The cycle is now complete and team can continue to run it as a continuity. No. 9, who comes from deep right corner and uses No. 14



DIAG. 1, SINKING AND FLOATING MAN-TO-MAN

With ball out in front (left), X-1 plays about 3' away with hands up, ready to retreat. Teammates collapse as shown, with X-3 and X-5 blocking goal. When ball goes to

side (center), X-4 moves to within 3' with hands up, ready to go with dribble. Teammates collapse to clog middle, while X-5 moves closer to corner man. With ball in corner

(right), X-5 moves within 3' with hands up, ready to go with dribble. Teammates block middle but never forget individual responsibilities. As you can see, this type of man-to-man resembles a 1-2-2 zone.

Multiple Team Defense

BACK in 1931, the great "Wonder Five" of St. John's University entered professional basketball as the Brooklyn Jewels. They were promptly matched against the reigning pro champions, the Brooklyn Visitations, and people began asking: "Can a great college club beat a great pro club?"

The Visitations answered with a thundering negative, demolishing the ex-collegians, 38-18. And it was defense that won the game for them!

Despite all the changes in the game wrought by the 10-second rule, the 3-second rule, the one-hand shot, the jump shot, and the 12-foot lane, the author still contends that defense is the key to winning basketball. Mix the old pro defense with a variety of zone and you have the antidote to the modern helter-skelter offense. As we say at St. Francis: "Always give the opponent a problem when you're on defense."

Since both the author and head coach Frank Keegan are disciples of Rody Cooney, captain of the fabulous old Visitations, it isn't surprising that St. Francis's defense is based primarily upon the style of the old "Vissies."

Age has not dimmed the luster of this sound, solid man-to-man defense. Direct responsibility is placed upon the individual player. When his man scores, we want to know "Why did your man score?"

We scout every opponent, then proceed to match men defensively. And it's in this department that we've been most fortunate. Over the past several years, we've been gifted with well-coordinated big men like Zeke Zawoluk (St. John's), Joe Quigg (North Carolina), and Tom Stith (St. Bonaventure), as well as hustling small men like Dick Duckett (St. John's), Fred Christ (Fordham), Sam Stith (St. Bonaventure), and Gus Alfieri (St. John's)—allowing us effectively to match men.

This, coupled with the great coaching of Keegan—who possesses an uncanny knack for analyzing game situations—has given us a solid defensive core.

Naturally, we've had to keep abreast of the times. The changes in the rules and the emergence of new offensive skills and tactics have forced us to broaden our defensive thinking. So, while the man-to-man remains our fundamental defense, we've incorporated many new twists

and zone theories—giving us a sort of multiple defense with which to cope with any type of offense.

Besides our conventional man-to-man defense, we employ the following from time to time:

1. Sinking Man-to-Man (Diag. 1). This is used very effectively to offset a height disadvantage and to defeat a cutting, hard-driving type of opponent. While sluffing and floating tactics are used, the boys are still basically responsible for a particular opponent. The ball-handler is attacked most aggressively, while

DIAG. 3, BOX-AND-ONE

X-1 plays great outside ball-handler man-to-man, while other defenders play a box zone. X-1 plays his man aggressively, not ball-hawking or gambling but harassing his passing. Wherever the man goes, X-1 goes with him. When ball is passed into corner (right), receiver is covered by X-5 while X-4 moves in front of pivot man and X-1 sticks with 1. Remember, "Stop the feeder and you stop the scorer."

By PAT GLEASON, Asst. Coach, St. Francis Prep (New York City)

the rest of the team closes up the middle.

The congested center often forces the offensive team to take bad shots from 20 feet out, enabling us to concentrate on rebounding and fast breaking. This defense calls for exceptional alertness and constant "talking it up" to safeguard against easy shots and sneak cuts through the middle.

2. Triangle-and-Two (Diag. 2). In beating St. Ann's for the Greater New York City Catholic H. S. crown last year, we employed this hermaphroditic defense—our two little men playing man-to-man against St. Ann's great passers and the three men in the rear playing a defensive zone triangle. We feel that this defense won the game for us (63-55).

3. Box-and-One (Diag. 3). Being aware of the tremendous impact of the jump shooter, we occasionally deviate from our basic man-to-man into a box-and-one—having one man constantly haunting the jump artist, while the rest of the team forms a box around the scoring area. Again, we try to get the jump shooter to take bad shots from off-balance and far out.

We also employ the box-and-one to smother the exceptional passer. We believe great scorers are often made by great passers, and that you can stop the scorer by cutting off his source of supply—the great feeder.

4. A 3-2 Zone (Diag. 4). We employ this zone against a good set-shooting team, putting three men 18 feet out while deploying the remaining two under the goal. The man in the middle of the zone is most important. He fills in every slot vacated by a teammate. While

one of the players is constantly and aggressively attacking the ball-handlers, the zone remains in box shape.

(Both Diags. 4 and 5 appear on page 42.)

5. A 2-3 Zone (Diag. 5). When the scouting reports indicate that the opponents are poor set shooters who don't quickly shift from offense to defense, we throw up a 2-3 zone that enables us to exploit the fast break.

6. A 2-1-2 zone.

We often line up as if in a zone, but actually play a loose man-to-man. This enables us to clog the middle and thus stymie the opponents' cutting game.

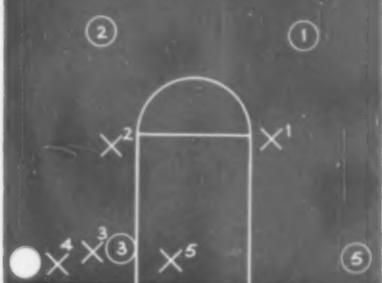
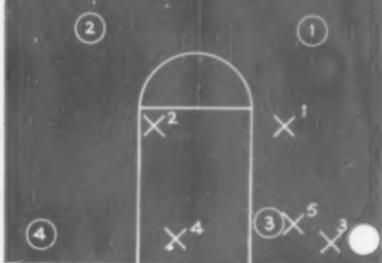
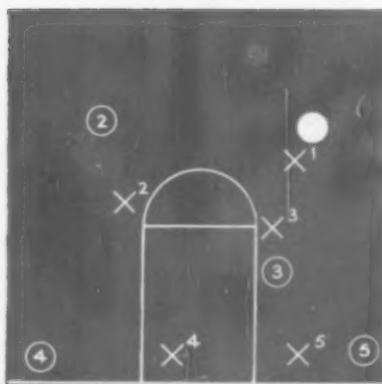
How do we keep shifting from one defense to another? Simple. We call a time-out and instruct the boys on the shift in defensive strategy.

We feel that a sound defensive player can learn a variety of defenses, but only after thorough schooling on the old, solid principles of man-to-man defense.

Our individual defensive man plays the man, not the ball. He's taught to rush back on defense to prevent a fast break, turn, look into the goal for hangers, then point and yell out the man he's picking up (at the center line).

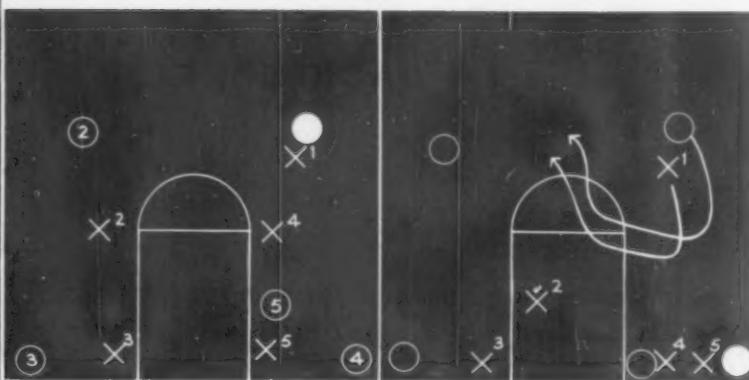
The smart defensive player is always hustling and thinking. The more he can learn about his man, the better equipped he is to stop him. The main points to discover are: (1) Is he fast or slow? (2) Is he shifty? (3) Can he cut both left and right, or only in one direction? (4) What are his favorite shots? (5) What are his favorite moves?

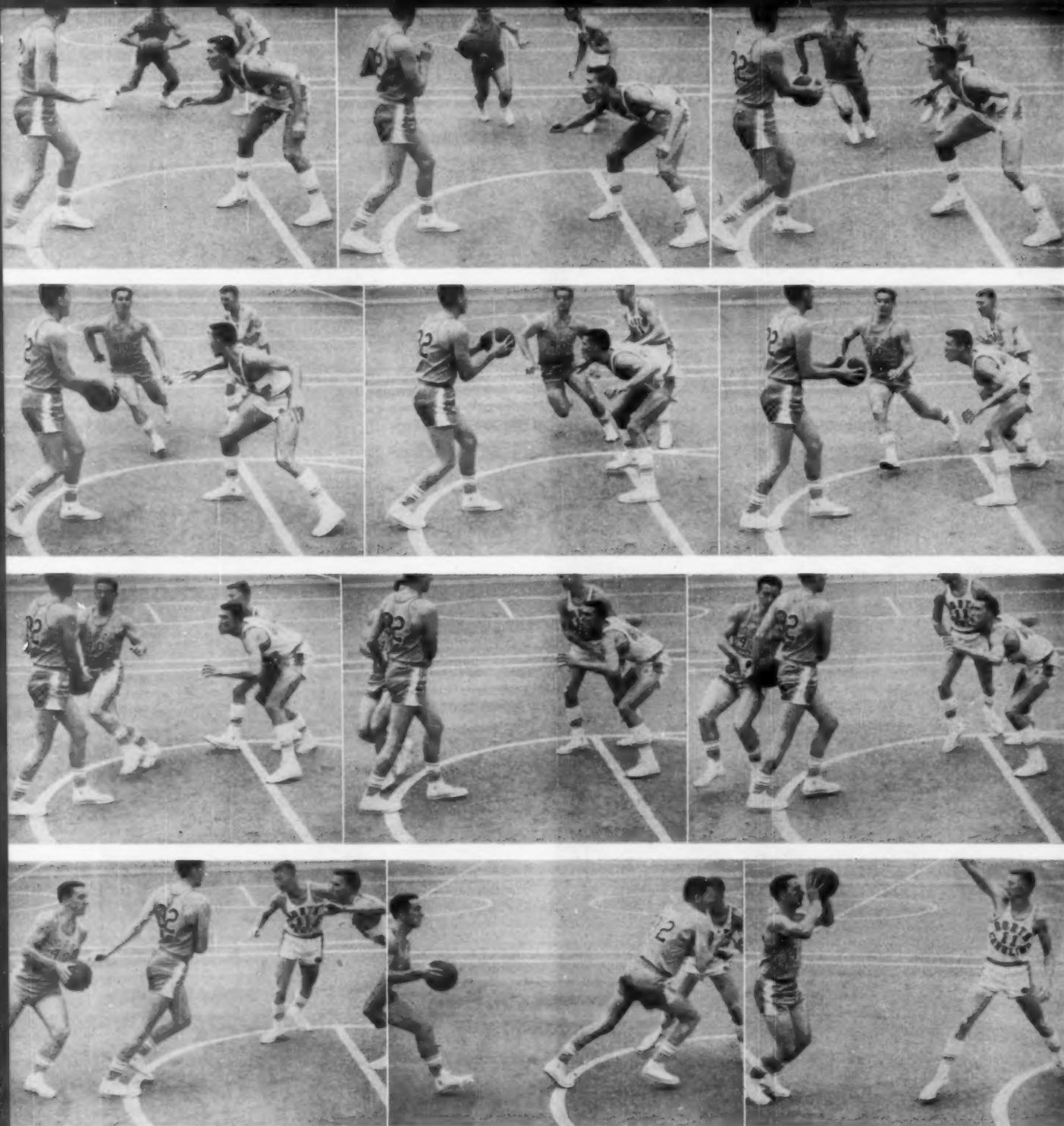
(Continued on page 42)



**DIAG. 2,
TRIANGLE-AND-TWO**

To prevent the two fine outside passers from feeding the pivot man, the two defenders up front (X-1 and X-2) play man-to-man while the three back men (X-3, X-4, and X-5) play a triangular zone defense. When ball is passed to right corner (center), the men in front float off while X-5 gets in front of the pivot. When ball is passed to left corner (bottom), front men float off to prevent cutting while X-4 plays ball, X-3 blocks the post, and X-5 shifts to a position underneath the basket.



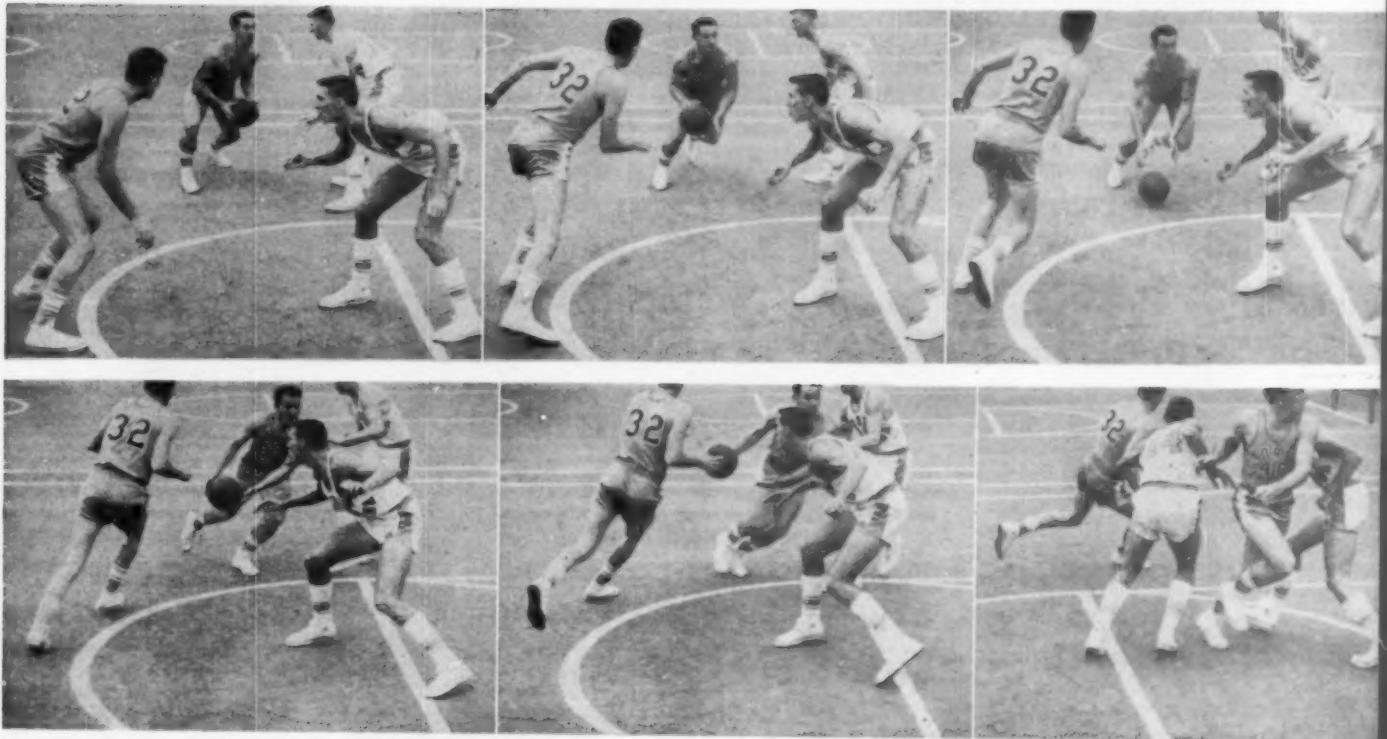


▲ BACK SCREEN

Demonstrated by Tommy Kearns and Bob Cunningham, U. of North Carolina

TWO-MAN SCREEN PLAYS

▼ INSIDE SCREEN



▼ OUTSIDE SCREEN

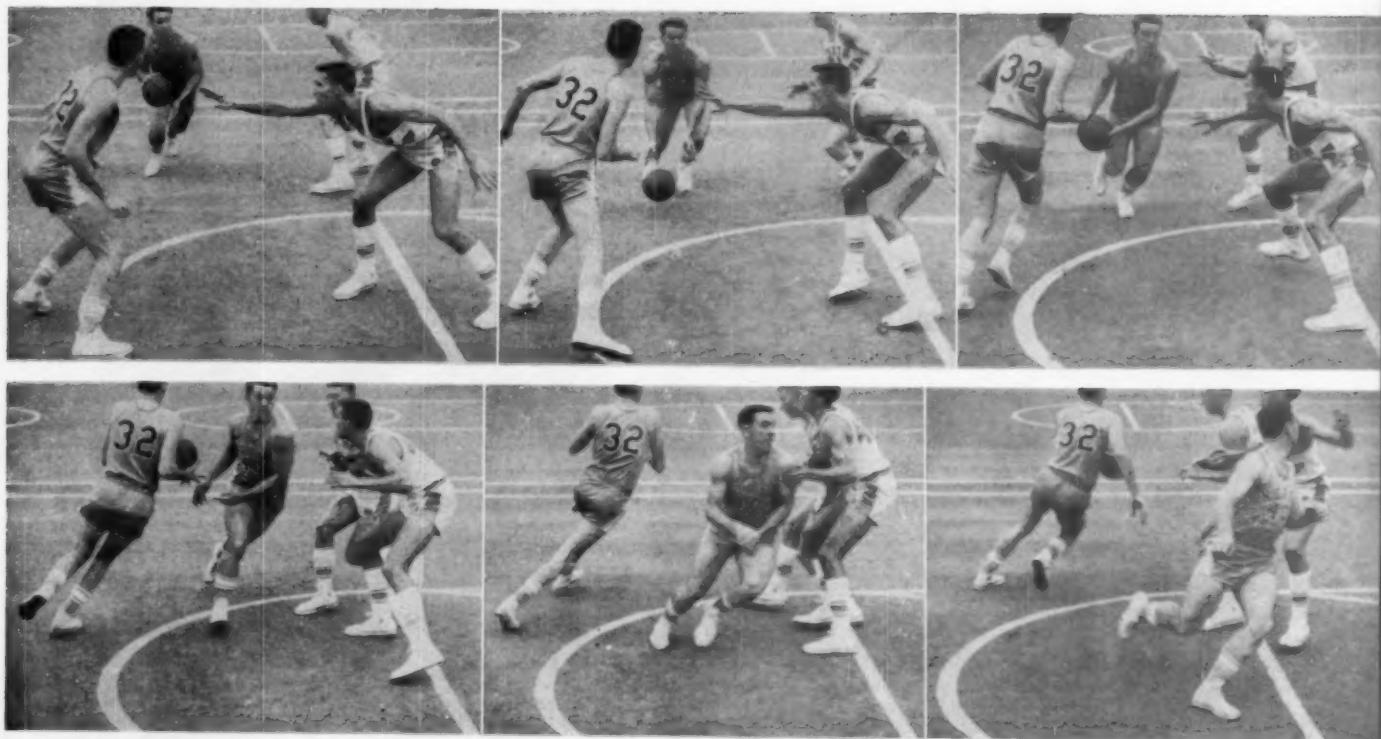




FIG. 1, Tip-Off Drill for practicing leads, breaks, pitcher study, etc. Runners break for second, run past bag (do

not slide), then return to the ends of the waiting lines while the next quartet assume positions on the base path.

Practical Baserunning and Bunting Drills

By **BUD GUTIERREZ**, Coach, Gonzalez (Cal.) Union High School

BASEBALL drills, to be of practical value, should approximate game conditions, not consume too much time, stress fundamentals, be enjoyable, and work in well with other phases of practice. Because we feel that bunting and baserunning are vital to a high school team's offense, we devote a fair portion of time to these two phases of the game.

"TIP-OFF" DRILL: The purpose of this drill is to:

1. Practice the fundamentals for leads and breaks so players will be able to steal second base successfully. We stress: good balance, not crossing the legs while taking lead, cross-over step in making the break, and not watching the catcher while running to second base.

2. Teach all players the "moves" and "tip-offs" of opposing pitchers and how to "get the jump" on each pitcher. We stress: alertness, quick reactions, and knowing mannerisms of opposing pitchers such as kicking stride foot too high, locking pivot foot on the rubber, and leaning just before making a throw.

3. Give catchers practice throwing to second base (under game condi-

tions). We stress: eyes on the ball, no wasted step when throwing, getting rid of throw quickly, and proper rotation of the ball.

4. Give all players a lot of explosive running for conditioning purposes. We stress the quick start and try to make sure the runners do not look at the catcher as they run.

5. Give infielders practice covering bases in a steal situation. The first baseman gets a lot of practice holding runners at first and putting the tag on runners: for second baseman and shortstop, we stress getting to the bag quickly, keeping eyes on the ball, and staying in front of the ball when taking the throw. Infielders do not cover second as they would in a game—they play in front of the bag as the runners are not sliding, but running across the bag.

How drill is run: The coach reviews all "moves" and "tip-offs" of opposing pitchers, demonstrating a particular mannerism and then asking any squad member the name and school of the pitcher having this specific habit.

After all "tip-offs" have been demonstrated, the players line up as shown in Fig. 1 and the steal is on.

The coach, or any player other than a regular pitcher, usually takes the mound (so pitchers won't be practicing poor fundamentals) and may either make a "copied move" to home or try to pick the runners off first with a "copied move."

If the pitcher moves to first, all runners get back to first (or the foul line) as quickly as possible. If the pitcher "tips-off" that he's throwing home, all runners make their break for second and run past the base—they do not slide. It's easy for the coach to see which of the players are beaten by the ball and which consistently arrive ahead (or nearly ahead) of the ball.

While these four runners are trotting back to first base, preparing to line up again, the coach asks any one of the four to name the pitcher who has the particular mannerism just demonstrated. If the runner fails to name the pitcher, the coach asks any other runner in the group or any runner waiting in line. This holds the attention of all players and keeps the drill lively.

This drill should never lag. It should be run quickly and should finish up with emphasis on the "move" that mimics the next opposing pitcher. We sometimes run the drill using just one or two specific



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"tip-offs" so our baserunners will remember the habits of their next opponent.

We find the drill is much more effective if three catchers are alternated (each making one throw). The catchers should be wearing full equipment and should make their throws from behind a batter.

We also use the drill for teaching our pitchers to eliminate tip-offs. The drill quickly shows you which of your pitchers fail to hold the runners tight and which let the runners "get the jump" on them. We also use this drill for teaching our runners to steal third base.

This drill is a lot of fun, the boys like it, and we feel it helps our boys become conscious of opponents' weaknesses. While on the bench, our players now really watch opposing pitchers for such tip-offs and we keep a book of these idiosyncrasies. We use this drill about two times a week, usually at the beginning of the practice session.

PLUS-OR-MINUS DRILL: We've found that many boys are unsuccessful bunters because they don't really want to bunt. The majority of players just want to bash the ball out of the park and can't see much sense in practicing bunting.

Although the game has changed considerably, it's still necessary to have competent bunters, and we feel that this drill helps some players who ordinarily wouldn't take much interest in bunting.

Purpose of the drill:

1. Motivate players to be successful bunters.
2. Stress placement of bunts.
3. Give infielders practice fielding bunts.
4. Reward successful bunting.

How the drill is run: Each batter starts with five swings and may choose either area A or area B (Fig. 2) in which to place his first bunt. If he places a bunt anywhere in the chosen area, he adds one swing to the five he's allowed in batting practice. He then attempts to place a bunt in the other area and, if successful, adds another swing to his allotted five.

If he fails to bunt the ball in the area, he has a swing subtracted from his allotted five. If he fails to bunt the ball in the area three times in a row, he takes one swing and lets the next batter take over.

In other words, a good bunt adds a swing while a poor bunt subtracts a swing. A player may get seven swings by bunting successfully in each area or he may get just one swing if he fails to bunt successfully in either area.

Almost all players like their bat-

ting practice and they'll practice sound fundamentals of bunting if they see it will give them extra "cuts" in the batting cage.

We usually use this drill only during the first round of batting practice. The second time around we have the batters either hit away with their regular number of swings or have them attempt two bunts (without subtracting swings for unsuccessful bunts).

Another variation of the drill is to use it as a plus-or-minus drill during the first round of batting practice and just as a plus drill during the second time around. (In other words, during the second round they are rewarded for successful bunting, but not penalized for unsuccessful bunting).

CHALLENGE SPEED RACES

DRAG RACES: Since we like to stress speed and quick starts in order to improve our baserunning, we usually finish most of our practice sessions with this challenge drill or drag races. We like our boys to challenge each other in running races and time all squad members in running the bases (about twice a week).

We post the times on the bulletin board with the player's name and time classified as follows: "plow horses"—over 19.0 seconds; "lumber trucks," 18.9 to 18.0; "piano movers," 17.9 to 17.5; "trotters," 17.4 to 17.0; "ramblers," 16.9 to 16.5; "scooters," 16.4 to 16.0; "speed merchants," 15.9 to 15.5; and "jets," any time under 15.5. It's surprising

to notice the increase in speed that can be achieved by freshmen as they keep trying to move into a higher classification.

We stress the cross-over step with each runner starting with his left foot on the corner of home plate in a baserunner's stance. One runner runs to third base (across the bag) and the other runs to first base.

The coach makes sure each runner is facing slightly toward his right shoulder (with feet perpendicular to the foul line). The runner on third base foul line faces the dugout and the runner on the first base foul line faces the mound.

At the sound of the gun (or board clapper), each runner breaks for his base and runs past the base. To help prevent injuries, coaches make sure runners don't jump at the bag or veer from their course until they're at least three strides past the base. A manager stationed in foul territory well up the third base line can easily pick the winner if he sights across from third to first base.

We usually have the losers race again, and since the drill doesn't take long we finish up our practice session with these races. Sometimes we have the three slowest runners help the managers carry in the equipment.

Two other drills we've found of very practical value for practicing fundamentals are the Cross-Over Drill and 2-&-1 Batting Practice. I believe these two drills have been previously explained in Scholastic Coach, but are well-worth mentioning again.

(Continued on page 40)



FIG. 2, Plus-or-Minus Drill for bunting practice. Bunter gets five chances. He chooses Area A or Area B (on first-base side) in which to place bunt. If he lays ball anywhere in area, he adds one swing to five, then tries to place bunt in other area. If he fails to place ball properly, he subtracts a swing from allotted five. Drill used during first round of batting practice.

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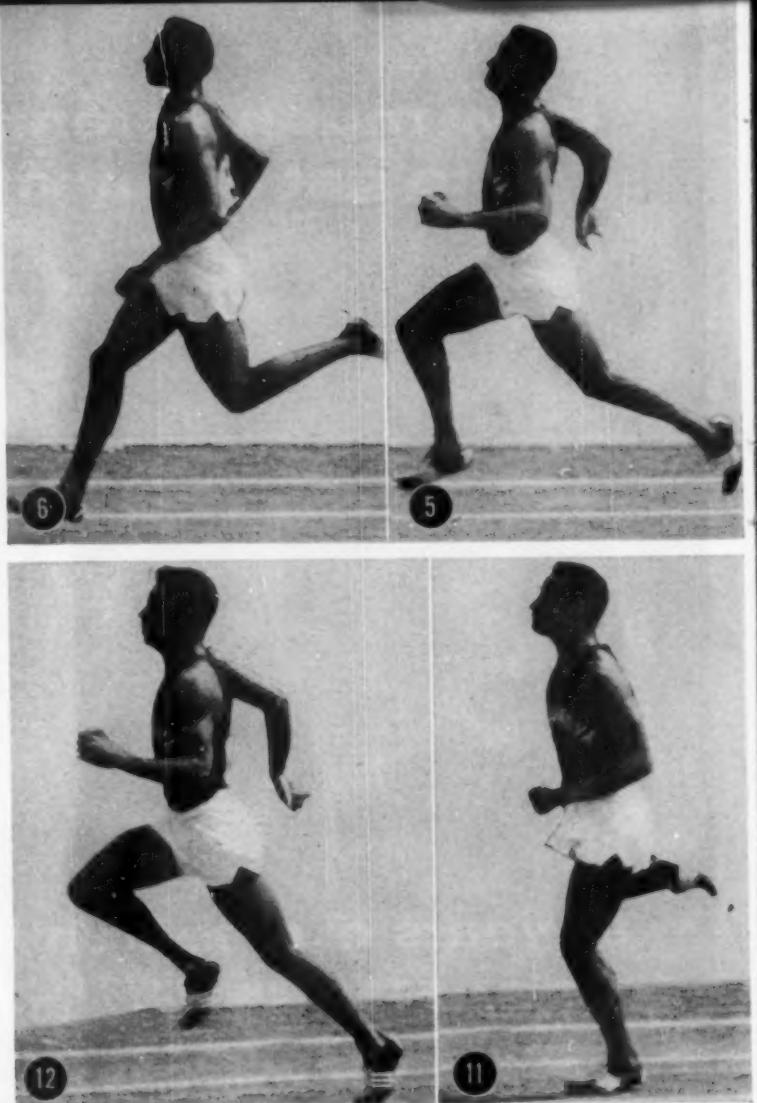
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By RICH HACKER

Coach, Berkeley (Calif.) High School

Developing the High School Quarter-Miler

LOOK at the make-up of a good quarter-miler often provides the key to the problem of developing one. Quarter-milers may be conveniently classified as either predominantly a distance-middle distance type or a sprinter type. Certainly no other event so blends the factors of speed and endurance.

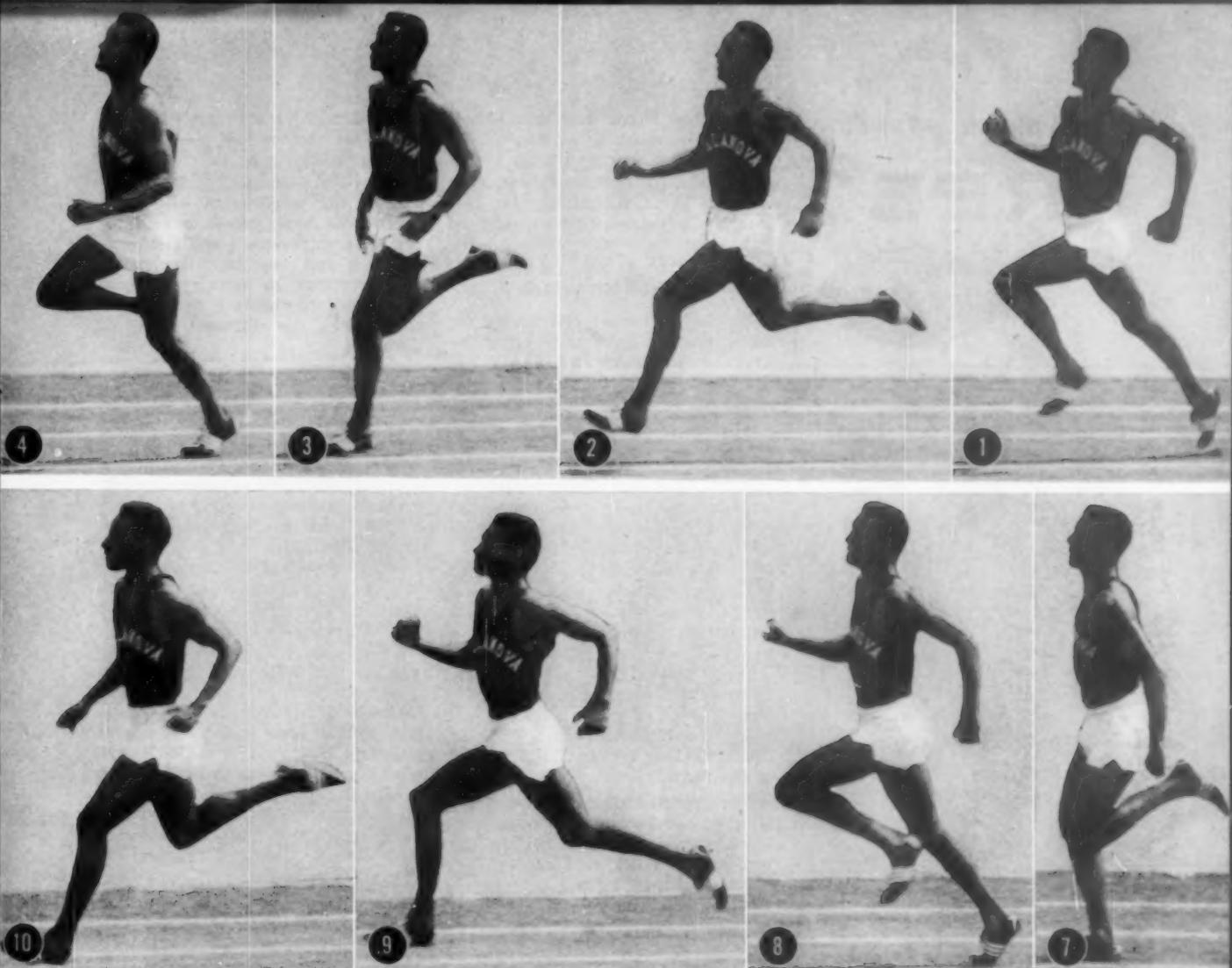
The man who makes your best Q. M. may show up as a fair 880, 220, or 100 man. Only on rare occasions will he be able to span these four events, as Jerry White of Cor-

coran (Calif.) H. S. did in 1956 (9.5 to 1:55.6, with a national high school 440 record of 46.7 sandwiched in) or Berkeley's own Henry Dorsey the same year with 10.0 to 2:01.0 with a 47.5 quarter in between.

The Q. M., unless he's a champion, will be better at one end of the line than the other. His wide range makes him extremely valuable in dual meets, thanks to his ability to run to your opponents' strength and still double up. The latter fact also helps score in larger meets.

At Berkeley High, we've had men place high in dual meets in the 880 and 220, the 100 and 440, the 440 and 220. These men are very often the heart of our relay teams because of their good speed, endurance (and therefore quick recovery), and I suspect also because of their ability to control themselves physically and emotionally—developed by their many running experiences.

We believe that the first part of our season (perhaps the first half of our dual meet schedule) is for



experimentation. Very often at this time, the boys who'll later double up will be running only one race, and that one not necessarily their favorite or potential best.

We try to give everyone a chance at as many different races as possible. We do this for two reasons: first, to help a boy find "his race," and, second, to give everyone a little team feeling—a certain respect for the teammate who'll usually run each particular race. (Our sprinter who ran a 9.7 non-winning 100 in the State meet, ran a 2:12 half in an early season meet on a windy day.)

Of particular importance to us is to have the sprinters try the quarter mile. We say quite often that "every really good sprinter should be able to run a good quarter," and we want our sprinters to take pride in having proved what we feel is axiomatic.

This is important for two reasons. First, there seems to be little doubt that to run a really good quarter

(under 49 seconds), you must have real if not great speed. Second, once the sprinter believes our axiom, he'll be a better sprinter and a better quarter miler.

Henry Allums, our 9.7 sprinter, ran the quarter three times with a best of 51.8. Jackie Williams, a 9.8 junior sprinter, ran two quarters with a best of 53.5. Fred DeWitt, a 9.8 sprinter, ran five or six quarters near the end of the season, winding up with a 47.9.

GETTING THEM STARTED

The question then can be raised: How can you get a sprinter to run a quarter? This situation is like so many others; it's more difficult to get started than to keep going—it's almost a matter of tradition with us.

Two important things must be done. First is the psychological prodding; repeating our axiom, "Betcha can't break 60," etc. Second

is the physical. Nothing will stop the sprinter and his buddies from running the quarter more than to "die on the vine" in the last 110 yards. They're very likely to do this if not closely supervised on their first few outings, because they're accustomed to running at too fast a pace.

So at first—this is particularly suited to early season—we have the best sprinter and best distance man (and so on down the line) stride several 60-65 quarters together. Most of them won't find it very difficult. Some may even say with typical sprinter casualness, "I'm ready for a 49."

The next step is, of course, not a "49" but perhaps a "54." Since most distance men or last year's quarter milers can run this fast, we tie the sprinter to his tail and put watches at the 110-220-330 marks or give some indication at these points that the boys are "on schedule."

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This then is our first job: to sell the boys as much as we can on the idea that the 440 isn't such a bad race. Once this is done, we can start to train them specifically for this race. (Obviously he's already in good condition.)

TRAINING THE QUARTER MILER

Before we can start training for any event, we must know what the event will require in competition. We must then modify our program according to the athlete's potential.

The mathematical formula, $220 + 220 = 440 = 330 + ?$, expresses the author's philosophy of Q. M. training. We have to add a couple of unknowns such as competition and physical condition. But basically the race and therefore our training can be broken down in these two ways. We can't sprint all the way, we can't jog all the way. After a certain amount of running and fatigue, a man can only run just so fast.

Or let's put it this way: When the chips are down and motivation is high enough, a given man can always run the last 75 yards at about the same rate he ran the first part of the race.

I believe this to be true and do my level best to convince our boys of its truth (within logical limits). The problem then is to run the first part of the race just as fast as possible, with no abatement in speed in the last 110 yards.

Since the personal and psychological factors are more important than the physiological, except in the laboratory, we must seek some other basis to determine how to run our race. We know from experience that a man may be able to run the 220 in 22.5, rest a set interval, and then run a 220 in 26—but that it's much more difficult, to say the least, to try to reverse the process.

We know that most good 440 times have resulted from faster first 220 times. Technically perhaps, we shouldn't call this a paced race, since the speed isn't constant. However, I prefer to call it this, just as I'd call the 220 and low hurdles paced races.

This is to say that you must run certain segments of your race at certain speeds or you simply won't be able to make up the deficit. For example, the 21.5 220 requires a 14.9 150 and a 10.0 100; the 19.0 180 L.H. requires a 12.6 120. This is because at the end of the race, most of the boys are going at about the same speed.

The next biggest problem after we've sold the boy on the 440, is to decide what his potential is. If we

aim too high, track won't be any fun. If we aim too low, the boy will lose too many races.

In making this decision, we should consult the athlete and the ouija board. The basic speed, determination, past experience, and performance of the boy may be prime considerations in setting the goal and therefore deciding how fast he should run the different parts of the race.

SET A GOAL

How much can a Q. M. be expected to improve? This is obviously a mixture of subjective and objective appraisals, for athletic improvement depends on a variety of factors. Suffice it to say that most do not expect enough.

Henry Dorsey, a senior at Berkeley in 1956, had run 53.5 as a sophomore (being primarily a half miler with a 2:03.9 best) and 50.0 as a junior. He then ran 47.5 as a senior. This was in the same race that Jerry White set the record of 46.7. (White had run 47.2 earlier in the season and was in lane 1. Dorsey, whose previous best had been 48.8 two weeks previous, was in lane 3.) I'm sure that neither of these boys improved that much in condition.

Fred DeWitt, a Berkeley senior in 1957, was ineligible as a sophomore and a 9.8 21.5 sprinter as a junior. He had turned in a 36.2 330 as a ninth grader and a 50.4 quarter as a junior; so his state meet quarter victory in 47.9 wasn't entirely a surprise to us. However, DeWitt's best prior to the state meet was recorded one week before in the North Coast Section meet, which he won easily in 48.7. This improvement certainly wasn't due to improved physical condition.

Nat Allums, a Berkeley junior in 1957, ran 55.0 in the ninth grade, 51.2 as a sophomore (coming down 2.3 seconds in the league meet), and turned in a 49.3 this year as a junior. This puts him ahead of Dorsey and DeWitt by .6-.1 second.

Does this mean that he'll be this much ahead of their best times when he's a senior? With due respect to Nat, who's a wonderful boy to work with, I doubt it. It means that he has been running closer to potential, perhaps due to competition, and I think he'll achieve about the same times despite a little less natural gift to work with. He was pulled to these better times by Dorsey and DeWitt.

LeRoy Whittle, a sophomore in 1957, helped the others by pushing with a 49.5. Whittle, at 6'1" and 180 pounds, is perhaps the ideal Q. M.—

(Concluded on page 40)

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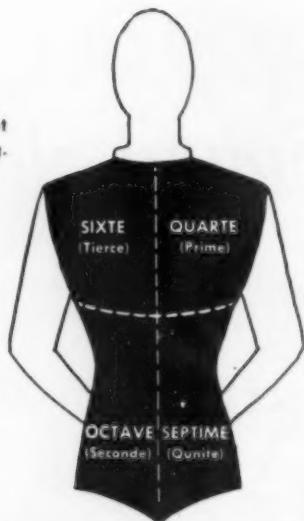


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FIG. 1: Foil target showing quartering.



Advanced Techniques for High School Fencers

A PREVIOUS article, "A Primer for High School Fencers" (October, 1955), outlined the basic coaching methods used in this sport.

To review briefly, it was pointed out that the duelling sword or epee most closely approximates the old rapier intended for the actual duel. Rules for its use are derived from the ancient code governing actual combat. Thus, the target includes

the entire body of the opponent, and touches can be counted only when made with the point of the weapon. In most interscholastic competition, the fencer first scoring three touches wins the bout.

The sabre, on the other hand, is the fencing counterpart of the cavalry or naval weapon. Touches may be scored with either point or cutting edge on a target including

trunk, head, and arms. Fencing with this weapon tends to be colorful and active, and five touches are required for victory in school and college competition.

In foil fencing, only touches made directly with the point on the legal target are counted. Since the fencers are limited to the trunk of the body, foil fencing is not only the most difficult but also the foundation of all other fencing. Five touches scored first by either one of the fencers constitute the winning margin.

Inasmuch as foil training is basic to all forms of competitive duelling, what follows is pointed toward further development in that weapon.

It's essential, of course, for the student to have mastered the proper grip, the "on-guard", proper methods of advancing both forward and back, the lunge, and the retreat.

In this early training, he will have gained familiarity with the target area shown in Fig. 1. He'll know the simple movements of attack to hit the target: the feint, the beat-aim-lunge, the disengage, the counter-disengage, and the coupe.

To defend against these movements, he should be familiar with parry four, in which he forces his opponent's blade to his left beyond the outside point of his body; and parry six, in which the defender's motion is to the right, forcing the blade clear to the inside (Figs. 2 and 3).



FIG. 2, "Parry Four": Defending fencer has forced opposing blade to his left and beyond target. Immediate riposte may follow from this parry.



FIG. 3, "Parry Six": Offensive blade has been diverted to the right and off target. Again, riposte may follow from this parry.

By D. Y. YONKER, Fencing Coach,

SCHOLASTIC COACH



FIG. 4, "Pressure Glide": Pressure has been applied on opposing weapon as body and arm of offensive fencer are advanced. Thus, defensive blade is kept off target and fencer gains his touch.



FIG. 5, "Coupe Lunge": The wrist flick is clearly shown with the offensive blade passing point of the defender's weapon from right to left. A lunge or other offensive action may follow.

Proper insistence and repetitive training on the above will have advanced the fencer to readiness for more advanced movements.

It's reasonable to expect the fencer to have learned that the weapon hand is normally held in either a supine (palm-up) or a prone (palm-down) position in relation to the fencing strip. He'll know that a disengage can be readily made by moving his hand quickly from the position of pronation to that of supination, or vice versa, when in contact with the opposing blade.

His emphasis should now be upon the development of speed of movement and increasing his repertory of tricks. Of the latter, those listed below will be most helpful.

BEAT LUNGE. This is a simple improvement of the beat-aim-lunge by the elimination of the second part. The fencer should now have achieved an "in-line" attack, and be able to follow the beating movement—designed to move the opponent's blade out of line—with an immediate lunge.

BEAT DISENGAGE. This movement is started in the same manner as the above, except that before the expected lunge, the blade is extended with wrist motion (pronation to supination) on the opposite side

feint rather than a complete movement, or as the beginning of a simple beating action. Upon completion of the circle, a beat-lunge is executed on the opposite side.

CIRCLE BEAT DISENGAGE. The action described above is performed, but before the lunge the blade is brought once again to the opposite side of the opposing weapon.

PRESSURE GLIDE DISENGAGE. A straight lunge with pressure being applied in order to remain in-line with the target area. It should be noted that this pressure must be applied along the inner third of the defensive fencer's weapon (area close to hand) to be successful.

PRESSURE GLIDE DISENGAGE. Use the pressure glide, but on feeling opposition or any movement to parry, drop blade underneath and extend on opposite side. Lunge.

COUPE LUNGE (Fig. 5). The blade is brought back with a wrist flick toward head of attacker (do not bend arm). After blade passes over point of opponent's blade, lunge. To avoid the error of allowing the blade to whip too far to the left, and off target, it's necessary to keep the point low by rotation of the hand into pronation when attempting to hit in "six" (see Fig. 1), and in supination when the action is in "four".

Riposte movements to take advantage of openings created by parries are extremely effective. They cause the attacker to resume the defensive in order to parry the riposte in an attempt to gain the offensive he has lost.

PARRY FOUR RIPOSTE (Fig. 6).

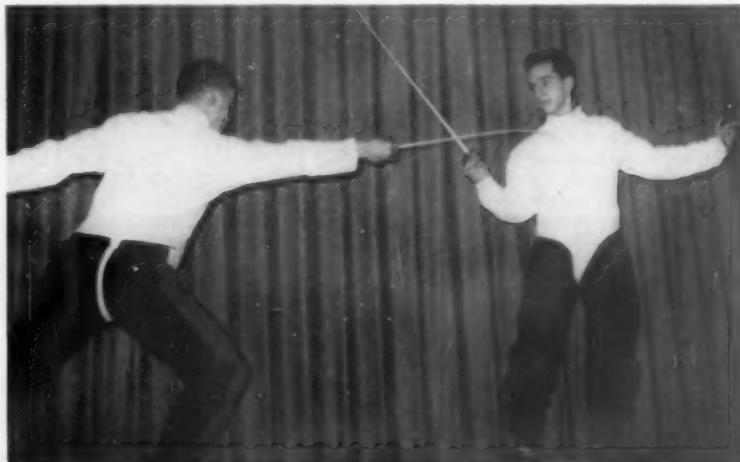


FIG. 6, "Parry Four Riposte": Facing fencer's blade has been forced to left off target and riposte has resulted in hit for defensive fencer who's now on offense.



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When the opponent tries to make a hit on the outside upper section of the trunk, push the blade to the outside (to the left) so that the point passes by. Extend and lunge.

PARRY SIX RIPOSTE. When the opponent attempts to hit the inside upper section, push blade off to the right. Extend and lunge.

In both of these riposte movements, the defensive fencer has gained the right-of-way by going on the attack. Thus, to these simple ripostes can be added all of the movements described in the attack section, above. For instance:

PARRY FOUR DISENGAGE RIPOSTE. After executing a parry four, bring the blade underneath and to the opposite side of the opponent's blade. Extend and lunge. Or, again:

PARRY SIX DISENGAGE RIPOSTE. Follow a parry six, as above, by bringing blade under and to opposite side of opposing weapon. Extend and lunge.

An exercise that will improve both parrying and the riposte, and which has the further advantage of being adaptable for any of the simple or secondary movements listed above, is the following:

PARRY-RIPOSTE EXERCISE. This starts with a beat lunge. The lunge is parried by the opponent and the riposte immediately offered. Riposte is parried, etc., in fast, repetitive continuity. Fencers practising this exercise will notice that the pattern of play will develop a basic count rhythm. The parry by the defending fencer will constitute the count of "one"; his extension to hit his opponent, the count of "two".

From this simple exercise it will be possible to introduce more complicated movements involving set patterns of disengages, coupes, etc., all based upon count rhythms which will aid the fencer in his development of accuracy and speed.

An example of such an exercise might be a four-count evolution based upon the following:

1. Attacking fencer beats opponent's blade.
2. Disengage from right to left side.
3. Disengage from left to right side.
4. Extend to hit.

Many different combinations of movements can be combined in like manner. Exercises such as these can be done in a repetitive count sequence in which one fencer works with his opposite in fast alternation, thus building up speed in both offensive and defensive departments.



FIG. 7, "Balestra": Fast closing and springing action is evident in skill.

BALESTRA (Fig. 7). This is a fast springing leg action in which the back foot closes to the front, achieving a wide advance just short of a lunge. Used as a device to gain distance, or to close with a retreating opponent, it's invaluable as a means of maintaining offensive advantage.

FLECHE. The fleche or "arrow" attack is universally frowned upon in interscholastic fencing. Actually, it consists of crossing the back foot ahead of the front in making an advance movement either in a single action or in a series of running steps in order to close with an opponent and press home an attack.

As a surprise tactic, it undoubtedly has great value. But due to its violence in the hands of an inexperienced fencer, there's danger of broken blades and the possibility of accident. The movement is to be found in common use among collegians and internationally schooled fencers.

In advancing the idea expressed in the earlier article that fencing can be readily mastered by schoolboys without long, uninteresting practise periods of close attention to perfection of form, it's well to note that a method of conditioning borrowed from boxing has tremendous physical and psychological value as a coaching device.

This is rope-skipping (Fig. 8). The high school lads pictured here learn the "running" method of rope-skipping, and include a warming-up period of five minutes of skipping before each practise session. Since it has been determined that skipping for six minutes is equivalent to running a mile on the straight, a high degree of leg conditioning is an obvious result.

(Concluded on page 41)

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MOST COACHABLE EVENTS for the TRACK COACH

*For quickest results, concentrate on the
hurdles, relays, high jump, and shot put*

WHEN graduation hits your track team with the dismaying finality of a dropped baton in a close relay race, you may survey the remnants of your championship team with mixed emotions. You may be torn between an inclination to live in the past and the necessity to face the future.

At times, the inclination is far more appealing than the necessity. But as your first meet looms bigger and bigger on the horizon, you begin wondering how you can build fastest and coach most effectively. You look at your green squad and wonder what events will pay off best for the amount of coaching time expended.

The fact that Concord High School has enjoyed rather consistent success over the past dozen years may be attributed to two things above and beyond good material. I've made it a practice to keep close tabs on rival schools and their personnel losses as compared to our own. This gives us a pretty good idea of what they've lost and a picture of the weaknesses they must offset in the season ahead.

It seems to me that any coach who's anxious to produce in track can learn from other sports the value of check sheets. If baseball, football, basketball, and other sports can benefit by charting weaknesses of the opposition, then we in track need to adopt similar aids. It never hurts to know your opponent's weaknesses.

With such knowledge of the opposition, I have a starting point in my building program. I know

whether there are points up for grabs in the hurdles, the high jump, the weight events, etc. "So," you may reply, "I know where the weak spots are, but I've got to have quick results. Where can I spend my coaching time most effectively?"

It has been my experience that the number one pay-off event for track coaches is the hurdles. If a sprinter has only fair speed, there's very little coaching you can do to develop him into a champion. You may improve his start, you may help him develop a secondary lift, but after that you've brought him as far as you can.

May I say hurriedly that I'm not about to urge you to convert him into a hurdler. I am saying that you'll do better to spend your time developing *someone* into a hurdler. The hurdles are much more coachable than the sprints.

I've discovered time after time that a boy can be started from scratch as a hurdler and made into a point scorer in a month. If your team competes in indoor track, you can start a hurdler green on December 1 and score with him in January.

But you must face facts; you'll need to concentrate on your hurdlers at the expense of boys in some other event like the mile or the dash. But, since you can't offset lack of speed in a dashman by good coaching, or coach a boy into running a 4:35 mile a month after he starts running—that is, unless you've stumbled upon one of those "finds" that make coaching a joy forever—it makes sense to spend a lot of time

with hurdlers. The quick results will be most gratifying.

Again let me hasten to add that I'm not urging you to forget your sprinters and milers; I'm merely saying that if you're facing a rush job of team rebuilding, you'd do well to take a good look at the hurdles as a starting point.

By the same token, there are points about hurdling more coachable than others. When working on hurdle candidates, I find myself concentrating on such points as the following: Is the first step off the mark long enough? Is the lead foot pointing straight ahead on landing? Is the trailing knee brought through high enough to permit a long first stride after the hurdle?

If you want quick results in the hurdles, you can get them by giving your attention to the same three points.

That first step off the marks is of particular importance to your beginning hurdler because if he doesn't reach a little on his very first step, he'll be in poor position at the first hurdle. In this respect he's a bit different from a regular sprinter. He must consider position at the hurdle take-off as well as his speed in getting there. Position at that first hurdle may well determine whether he's going to lean into it as he should or leap up and sail over.

PLACEMENT OF LEAD FOOT

Good position at the take-off is only part of the start of fast improvement. He must also be checked for correct placement of the lead foot. He must drive his body forward over the ball of the foot instead of turning it toward the right or left and thus having it serve as a brake to slow his forward momentum.

To achieve that correct placement of the landing foot, your boy will have to resist the temptation to swing his upper body to the side as he goes at the hurdle or to throw his arm to the side as he clears.

Just as you concentrate on the position of his landing foot so that it will point him straight at the next hurdle, so must you emphasize the high lift of the knee of the trailing leg as it comes over the hurdle. This

By W. HAROLD O'CONNOR, Coach, Concord (Mass.) High School

enables him to get sufficient length in his first step after the clearance.

To any beginner, that's of great importance because it gives him the necessary stride length for an easy three steps between hurdles. You can offset a surprising amount of your opponent's speed by good hurdling form. That's coachable, not God-given.

There are times in every coach's life when he finds himself without sprint men. He must face the fact that his boys are lacking in the one thing that no coach can give them.

The only recourse available to offset lack of natural speed is concentrated work on starts. Those tenths of seconds that can be shaved from a boy's starting time may spell the difference between an also-ran and a point-scorer.

Concentration upon running at full speed to a point well beyond the finish line will help save another fraction of a second—which faster boys sometimes waste by a slight slow-down at the tape.

OFFSET SPEED IN RELAYS

It's in the relays that coaches can do the most to offset their opponents' edge in speed. When your sprinters have obvious natural limitations in speed, you must concentrate more than ever upon the baton exchange, particularly in sprint relays. Eliminating time waste in passing is the same as adding speed to your individual runners. Whether your boy runs two-tenths of a second faster than his opponent or saves the two-tenths by passing more smoothly adds up to the same thing.

Just remember that your rival's 11s. sprinters in the 440 relay can suddenly become as weak as 11.5 sprinters if they're ragged in their baton exchanges. This definitely is an area in which good coaching can offset opponents' sprint speed.

In making the next choice of an event upon which to spend coaching time for speedy results, I am torn between two events—the high jump and the shot put. I say this with due consideration to the need of special talents for success in either.

You may look upon both these events as the type that pay off only after long and patient practice. This is undoubtedly true, if you're thinking in terms of champions. But it isn't necessarily true if you're thinking in terms of point scorers who meet only average opposition.

Assuming you've found a high jump prospect who possesses fair bounce, you can achieve quick re-

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sults by concentrating upon the elimination of two or three basic errors in jumping. Insist first of all that your jumper establish a consistent take-off mark and a regular approach. Don't let him gamble on his take-off.

Next, if your boy uses either the belly roll or the western roll, emphasize holding his head back, not dropping it forward as he leaves his mark. You can get dramatic progress by stressing this phase of the jump.

Thirdly, if your boy is doing the belly roll, concentrate upon a speedy lift or kick of the trailing leg. If he does the western, emphasize the snap of the tucked bottom leg so it actually hits the top leg and leaves no space between the two.

The shot put normally is a long-term proposition. True, you occasionally find a beginner whose strength and coordination stamp him as a coming champion very early in his career. Yet even the average putter can be brought along faster by spending time on key points in his development.

No matter what style your boy uses, he must learn to hold his putting elbow up and in line with his shoulder. If he keeps dropping it toward his stomach, he'll make little progress.

Once he has mastered the proper arm position, you can work hard on what I think is the biggest bugaboo of shot putters—the plant of the left foot at the end of the glide. It's amazing how many great putters fall into the error of putting that foot into the bucket without being aware of it.

The fault is far more evident in the efforts of beginning putters. I've seen beginners add as much as five feet in one hour just by having a coach correct that one basic error.

Check on that serious fault if you want to see quick results in shot putting. Make your boy plant that left foot on a line drawn through the center of the circle rather than far to the left of such a line, and things will begin to happen to the shot.

Also be sure that he's not leaping into a reverse in his attempt to get the shot away. Such a leaping reverse often leaves him putting with both feet off the ground. Legs pushing from thin air can't propel a shot very far.

It's my firm belief that coaching time spent in the fashion described is coaching time well-invested. It will seldom lead to miraculous results. But even small windfalls can prove life-savers for the track coach who must face the season after graduation of his champions.

Ball-Control Freeze Continuity

(Continued from page 9)

in and out enough to receive the pass from out of bounds, turns, faces the defensive man, then dribbles the length of the court—ultimately going for the lay-up.

The defensive man challenges him all the way, trying to steal the ball or at least force the driver away from the hoop. Then they switch positions and come back to the starting point where the next pair takes over.

We then add to this by working two-on-two (full court) in the same manner. In this drill, we want the man with the ball to advance as far as he can before passing to his teammate. We don't permit them to bring their defensive man laterally across the man with the ball. Hence, while they come toward each other when the pass is made, the passer goes away from the ball. This clears the area for the new man in possession.

To add further pressure, we insert a third defensive man to oppose the two ball-handlers in their full-

court offensive maneuvering.

In addition to improving the ball-handling skill of the players, this drill develops the confidence necessary for efficiently meeting the exacting demands of the full-court press. Squad members discover for themselves that it's pretty tough to take the ball from a man in the one-on-one situation. When this occurs, individual poise is certain to follow.

If, then, in the game situation, we're being pressed by the defensive team, we keep the number of players in the back-court at a minimum. If two men can bring the ball through the press safely, we send the other three down-court to set up in offensive position; but, most important, to take their defensive men out of the back-court.

We try to maintain the one-on-one situation to advance the ball over mid-court. If help is needed by the dribbler, the second back-court man gives it in the same manner as in the aforementioned drill.

Once the ball is worked across the mid-court line, we overload one side of the court and go into our ball-control offense. This takes the form of the continuity demonstrated in the accompanying pictures.

The picture series shows one complete cycle, starting with an overload on the right and finishing with the overload on the left. Note that all screens are made away from the ball. Again the objective is to prevent the defense from doubling up on the man with the ball.

If a man is being heavily overplayed, he has the open lane for cutting to the hoop. When he's being tightly played, so that a pass to him might be risky, he merely screens away from the ball for the man on his side, who becomes the pass receiver.

With players constantly looking to go behind the overeager defensive man plus the steady threat of the cutter from the heavy side, constant pressure is being placed upon the defense. There's the continuous threat of the field goal.

If the defensive team is willing to gamble, and leave us open for the lay-up, we will take it. If they play us conservatively and prevent the lay-up, we're going to maintain possession of the ball. In either case, we should be able to maintain a lead in the late game situation.

A few operating rules are mandatory:

1. Pass receivers must come to meet every pass.

2. The pass receiver must be definite in his movements—either he comes to receive the pass or he cuts for the basket or moves to screen away. Half coming and going position can be disastrous.

3. Upon receiving a pass, the player's first move is to turn and face his defensive man—without a dribble.

4. Cutters must be really "open" before the passer issues his pass.

5. Never try to force the ball through the defense.

When the players have acquired the knack of this pattern, we practice "end-of-the-game" situations. For example, it will be announced: "Two minutes left to play, varsity leads by one point, varsity ball out of bounds under the defensive basket." The varsity runs the ball-control offense, while the defense tries to gain possession and score.

By repeating similar situations and varying them to include "behind by one", "tie score", or "ahead by three", we feel that the players get needed work in many of the critical situations they'll be facing during the season.



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CASEY STENGEL has no monopoly on double-talk. Once the basketball season rolls around, friends, fans, reporters, and other well-wishers bombard hoop coaches with questions about their teams. For reasons best known to us coaches, most answers take the form of stock phrases or sentences, usually cloaking our true feelings. Following is a list of these answers, with accompanying translations, which John Q. Public will either hear or read during the course of the hardwood season:

Statement: "I'm junking the weave for a single-pivot next year."

Translation: *A 6:7 transfer enrolled during the summer.*

Statement: "We may get a bit of help from our reserves."

Translation: *His JV team was 24-1 last season.*

Statement: "We've juggled the schedule to make it more attractive."

Translation: *Some of the tougher opponents have been dropped.*

Statement: "I hope we can rebound better this season."

Translation: *His starting five will average 6:3.*

Statement: "To be a great player, you must always think basketball."

Translation: *He's worried because three regulars are going steady.*

Statement: "Our fans will see a fighting, hustling ball club."

Translation: *He lost three All-County players through graduation.*

Statement: "The play patterns we devised are beginning to click."

Translation: *Four of the first five are shooting above 40%.*

Statement: "If my center keeps practicing, he can make All-State."

Translation: *The boy is thinking about a part-time job.*

Statement: "I hope to do much more scouting this year."

Translation: *He's been able to get expense money for his wife.*

Statement: "We hope to be stronger in the back-court."

Translation: *Both guards were honorable mention All-Staters.*

Statement: "Competition is so keen, we cut several good prospects."

Translation: *Why doesn't the school buy more than 12 game uniforms?*

Statement: "It was purely a judgment call on his part."

Translation: *He'll never referee another home game for us.*

Statement: "We will be working on basic ball-handling tomorrow."

Translation: *The opponents' pressing tactics broke the game wide open.*

Statement: "Defense will be a major factor in tonight's game."

Translation: *If we can't hold their leading scorer, we're done.*

Statement: "Circumstances often dictate the type defense to use."

Translation: *In this bandbox, we expect a full-court press all game.*

Statement: "The away games this year will give us needed experience."

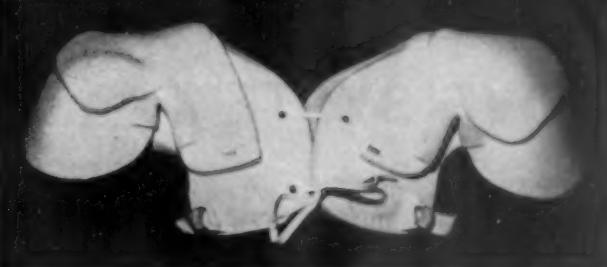
Translation: *He's hoping for an even split on the road.*

Statement: "The boy's family talks nothing but basketball."

Translation: *The coach is being second-guessed for not playing their son more often.*

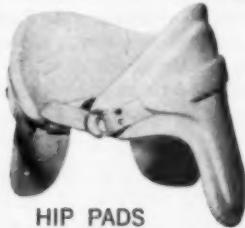
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For this reason — when wrestlers feel the final outcome is an established fact — they often lack incentive to expend maximum effort. This is most dismaying to coaches, who know that a boy can improve only as long as he puts out 100%, has incentive for improvement, and can gauge his progress.

The factor of incentive is especially vital with young and weak wrestlers, and weak teams in general. It's fine to exhort a boy or team to go out there and win. But this is often said with tongue in cheek, the coach knowing full well that victory is extremely unlikely.

It's also fine to pat the loser on the back and tell him that he's looking better. But that's pretty hollow-sounding also. How much more effective it could be to show him in black and white his improvement and achievement!

Three years ago I took over the wrestling position at a small high school which had only one year's experience in the sport. The future looked dark against the array of powerful squads on the schedule. I knew we'd have to face losses for awhile, and I knew I'd have to maintain incentive for many of the boys.

Faced with this problem, we devised a point system for our matches which would, more or less, accurately measure wrestling effort and achievement regardless of win or loss. The end result of our undertaking is what we call the "Wrestling Ratio."

Although somewhat complicated in form, the mechanics of determining the "Wrestling Ratio" are simple. A record or tally sheet is kept by the coach (or manager) for each boy during his match.

A running record is kept of the number of specific efforts, each of which is assigned various point values (see attached sample record sheet). Points are also earned for minutes of riding time, which is a form of wrestling effort.

The point values for the various efforts are, of course, arbitrary and represent a value judgment. These values could be changed to reflect the emphasis of a particular coach.

Briefly, the wrestling efforts recognized are as follows:

1. Take-down tries—a legitimate try of a regular maneuver, such as a double knee drop.

2. Take-downs, as recognized by the officials.

3. Escape tries — this must be a

complete effort which is blocked by the defensive wrestler. Merely sitting out without an attempt at following through is not counted.

4. Escapes or Reversals, as recognized by the official.

5. An escape from pinning hold. After being caught in a pinning combination, a wrestler fights his way out. This represents a major effort.

6. Break-downs — breaking the bottom wrestler down to the mat, taking him off his feet or knees—a preliminary for setting up a pinning combination.

7. Pin try—acquiring of a pinning combination and a sincere attempt to follow through for the pin.

WRESTLING RATIO RECORD SHEET

WEIGHT	TAKE-DOWN TRIES		TAKE-DOWNS		ESCAPE TRIES		ESCAPE PINS		BREAK-DOWN S		PIN TRIES		PIN-BEAR PINS		RIDING TIME		TOTAL POINTS		TOTAL TIME		TIME FACTOR		WRESTLING RATIO			
	POINTS	2	4	2	4	5	6	1	2	4	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
MANZANARES	95	"4	'4	'2	'4	"3	"4	"8	"4	"2	19	2:54	1	12.0												
BEASLEY	103	'2	'4			"5	"2	"4	"2	"2	19	1:38		12.7												
TAFOYA	112	'2	'4	"14	"4	"5	"4	"4	"4	"4	41	6:0	5	11.8												
SMITH	120	"4		"10	"8	"10	"2	"2	"2	"2	38	6:0	5	11.3												
BASHLINE	127	'2	'4	'2	'4	"6	"6	"12	"12	"12	44	4:35	3	12.7												
CAPUCHIO	133	'2	'4	'2	'4	"5	"7	"4	"4	"6	38	3:51	2	11.5												
LAWSON	138		"4								4	3:22	2	3.1												
BOVE	145	"4	'4	"10	"12	"10	"10	"8	"9	"7	67	6:0	5	16.1												
KIETH	154	'2	'4	'2							8	1:41		5.1												
EVATZ	165	"4		"6	"4	"3	"4	"4	"4	"2	29	6:0	5	9.8												
BRIGHT	175		"4			"3	"2	"4	"2	"15	3:49	2	5.7													
HOLLOWAY	187	'2	'4			"2	"4	"4	"1	"17	1:06		17.0													
TEAM TOTAL		28	32	56	40	20	45	42	48	42	353	47	AUR	10.0	2.5											

*one ratio point for each full minute over one

8. Pins—includes near pins and predicaments as recognized by the official.

9. Riding time—two points are given here for each minute of riding time.

At the end of the match, the points are totaled and then divided by the length of the match (to the nearest half minute). This quotient becomes the "Wrestling Ratio" after the time factor is added.

The time factor is a whole number which is credit for wrestling past the first period. One Ratio point is added for each whole minute after the first minute. The time factor is used to compensate for the increased difficulty of effort later in the match, and also to serve as an incentive for poor wrestlers to keep from getting pinned.

From experience, we've found that the wrestling "Ratios" range from three to 20. Anything less than five is considered very poor; five to 10 is mediocre; 10 to 15 is good; and 15 to 20 is superior. The "Ratio" also can be figured for the team as a whole and forms a measure of team effort and progress.

After three years of using the "Wrestling Ratio," I'm convinced of its value in motivating losing wrestlers to improvement and in stimulating good wrestlers to maximum effort. A record of "Ratios" over the season generally shows steady individual and team improvement, which recommends it as a measure of progress.

Wrestlers interest in the "Ratio" is extremely high, and the query, "What was my ratio?" is usually one of the first comments after a match. The competition among the boys for the highest "Ratio" is always keen. A good "Ratic" has supplied spurring encouragement to many of the young wrestlers, who've showed fine fight and effort in losing matches.

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By MONTY WELLS
Coach, Brookline (Mass.) High School

Selecting the High School

**A tournament plan which can be run off in minimum time
and which enables the coach to see part of every round**

MANY high school golf coaches have other coaching duties in the fall that make it impossible for them to have any personal contact with the squad at that time. While they could run a tournament in absentia by merely posting an elimination tournament and instructing the players to arrange their own matches, a more practical plan is feasible.

Here at Brookline High School, we've initiated a tournament that can be run off in minimum time either in the fall or spring, which enables the coach to see part of every round played by the candidates with a minimum of travel about the course. Coaches who are constantly on the lookout for time-tested methods of improving their squads will find this idea of considerable value.

Since time is a vital element in the spring, I shall describe a simple way in which the tournament may be conducted. For the sake of simplicity, I shall outline a 32-player set-up. Actually, our school runs two 32-bracket groups according to playing ability based on a 9-hole qualifying round. Our grouping usually separates nicely at the "below 50" and "over 50" strokes per 9 holes.

The individual matches are 9-hole match play affairs. In the event of a tie at the end of 9 holes, the boys play "sudden death" until one or the other wins a hole. Semi-final round matches are 18 holes, and final matches are 36 holes.

A close study of last year's tournament reveals that the tournament is a "loser-plays-loser," "winner-plays-winner" type of competition. Thus, no player is ever eliminated. He continues to play as many matches as the more fortunate. This offers a means of sustaining competitive interest for everybody out for the sport. No boy is ever cut from the squad, and this helps build the future program.

If time is very important, as when

the program is started in the spring and little playing time is available before the first interscholastic match, individual matches can be played in a foursome with three matches being played simultaneously.

For example: the first foursome is 'A' vs. 'B' and 'C' vs. 'D'. It's perfectly possible to have each of the four players understand that the winner of the 'A' vs. 'B' match is matching his card against the eventual winner of the 'C' vs. 'D' match, and the loser of the 'A' vs. 'B' match is matching his card against the 'C' vs. 'D' loser. In this way three matches can be played in 9 holes or less.

AUTHOR Monty Wells is a most distinguished golf authority. Besides coaching golf at Brookline High School (where he's also a physics instructor), he's a Class A member of the New England Association of the Professional Golfers Association and is the reigning golf pro at Martha's Vineyard Country Club.

This makes for a tremendous saving in time, and where time is of the essence this plan should be seriously considered. Although such short matches may not always give a true indication of a player's ability, they do give the coach an opportunity to see four players under actual pressure, which is most advantageous in high school golf where the actual games of the players are very nearly equal. It emphasizes the "killer instinct" of playing your very best golf from the very first hole.

In this type of tournament with each boy playing five matches, there's plenty of opportunity for the coach to adjust any flagrant inequalities by means of challenge matches after the tournament is finished.

We've chosen the match-play method of team determination for several reasons.

First, because all our matches are played on that basis.

Second, one bad hole will cost a player only the hole and not the match, as could occur in a short medal round.

Third, fewer holes need be played because many matches will end before the 9 holes are completed. This is very important if you must play your matches on a course already crowded with club members or transient golfers, as happens at many of the public courses on which high schools must play.

Fourth, such matches can be played on any course at any time, starting on any hole without making the competition unfair.

Fifth, shorter matches mean less time on the golf course and more time for school subjects.

In drawing up the tournament, it may be necessary to make use of byes. The proper placement of these byes can be found in any rule book and thus isn't included in this article. Suffice it to say that in a 32-player tournament, there should be 8 seeded players with byes awarded to these 8 in order of ability according to the number of byes needed.

Byes are not desirable if they can be avoided. It's best for each boy to play five matches. But first-round byes to the better players do give the weaker players an opportunity to meet players of their own ability first.

Since the tournament should start on the first spring day that the course is available, it's advisable for some sort of preliminary work to be held in the gym or other practice area late in the winter. If finances forbid the purchase of a driving net (a 10' x 10' x 10' net costs about \$125), then plastic or cotton practice balls can be driven from a small piece of plywood with a rubber tee attached.

In this manner, instruction on stance, grip, and swing can be well-grooved before the first day on the course. An inexpensive practice

Golf Team

putting green (around \$10) affords a valuable mechanical and competitive teaching aid.

Meetings one day a week for the purpose of discussing links strategy, etiquette, and rules are extremely important. The P.G.A. has many fine films on all phases of the game, and I'm sure your local professional will be only too glad to obtain them for you for use at these weekly meetings. Since golf is primarily a game for the individual, such meetings offer excellent means of building a team spirit that will produce better performance on the day of the matches.

FORM A GOLF CLUB

We've found that the formation of a golf club as an extra-curricular activity has stimulated interest in the sport. Dues are collected, with the proceeds paying for film with which to take pictures of the players for use in studying their errors in technique. Such a club can be run part of or all through the year according to your individual need or desire.

Further visual aids, of course, involve the use of a bulletin board for posting tournament sheets and as many items as possible to stimulate interest and aid in the learning process.

At the conclusion of the tournament, a ladder can be posted listing the order of finish of the 32 players. Challenge matches, according to any method you wish, can then be arranged so that players can be moved up into higher rankings on the ladder.

It's helpful to have some type of felt insignia that can be worn on a sweater or jacket to represent various stages of ability on this ladder. These could vary by either color or type of class, such as senior, intermediate, junior, etc. This serves as a stimulus to the boys lower in the standings who aren't able to play in the team matches.

Perhaps this has given you some new ideas to work on, or recalled some you have used in the past. At any rate, we hope it has helped in one manner or other to enrich your own golf program.

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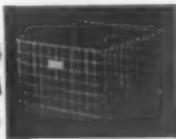
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First Lesson in Pole Vaulting

(Continued from page 7)

won't have time to swing up his feet before reaching the crossbar.

When the pole is carried down the runway, the palms of both hands are downward, and the fingers and thumbs encircle beneath the pole. The grip resembles that used on a baseball bat, with the top of the pole corresponding to the top of the bat—except that the vaulter's hands are about two and a half feet apart and the pole is carried at the right hip, almost parallel to the runway, with the tip about head high. The pole touches the hip at a point approximately midway between the hands. Both elbows are slightly bent.

The proper grip and carry should be demonstrated to the beginner, since demonstration is clearer and simpler than mere explanation.

2. **The Run:** A run of 50 to 60 feet at half speed is sufficient to give the vaulter ample time to slide the pole into the box and take off and still have enough momentum to get up into the air. Don't worry about regularity of steps yet. Let the beginner improvise, since he doesn't need much speed at this point. But make sure he faces straight ahead when running; a sideways run makes for awkward vaulting.

3. **Pole Plant:** Insist that the novice concentrate first on getting the pole into the box, since he may slip and be injured if the pole misses. *He must keep his eye on the box until the pole is definitely planted.* The underhand shift is the simplest, with the pole hitting first within 8 inches of the stopboard, not two feet away, or it may bounce from the box instead of sliding forward to the stopboard.

After a few trial jumps, the novice can be shown how to shift his lower hand up, or more accurately, how to push the pole through his lower hand as he slides it into the box. Never should he slide the top hand down. After the handshift, the hands should be no more than 6 inches apart.

4. **The Take-Off:** Simplify instructions on the take-off by telling the learner merely to hang on the pole with arms slightly bent. Most novices will release the pole too soon on the first few tries because they're unaccustomed to the tension exerted on the arms. To beginners, vaulting is usually conceived of as high jumping with the pole used for balancing. However, after

a few attempts they learn to use the pole for support, riding it into the pit.

After the take-off, both legs as well as the body should swing up just to the right of the pole. The inexperienced sometimes try to go to the left or even up the middle.

5. **The Pull-Up:** In order to convey the idea of pulling, have the prospect attempt to chin himself on the pole after he has taken off, if he hasn't already been doing so. The pull must be made simultaneously with the turn.

6. **The Turn:** Most beginners fail to turn properly. The vaulter must pivot his body as the pole is nearing an upright position in order to clear the crossbar with his chest toward it; otherwise he may dislodge it with his back or side. The vaulter can learn to turn by rolling around to face the runway as he pulls.

To emphasize throwing the right leg up and over, the left will also aid in turning correctly. *A properly executed turn will usually eliminate poor landings and thereby help prevent injuries.* It's therefore important that the beginner give due attention to mastering the turn.

7. **Pole Release and Landing:** For the first few jumps, the tyro tends to ride the pole into the pit without releasing it. But after he has learned the turn, he's in position to release the pole correctly. This is done by simply opening the left (or lower) hand, then the right as the pole is given an easy backward flip. When the vaulter is dropping to the ground, he may remain either facing the bar or turn toward his left, landing on his feet first, then

SUCCESSFUL is just a mild way of describing Brother B. G. Luke's record at The West Philadelphia Catholic High School for Boys. In cross-country, his teams have won 10 consecutive Philadelphia Catholic League titles, 59 straight League dual and triangular meets, and 8 City crowns. In track and field, they've won 10 straight Pennsylvania State Catholic titles and recorded 57 wins and only 2 losses in League dual and triangular competition. His article is based on a chapter from his forthcoming book, "Coaching High School Track and Field Athletics" (Prentice-Hall, Inc.).

his hands. If he's reminded just when and how to release the pole, he'll usually do the rest instinctively.

8. The Swing: Next, concentrate on elevating the legs and hips. Instruct the learner to swing his feet as high as he can. His first few attempts will more than likely be crude.

It's easier to learn the swing-up if there's a bar to clear. (Note that a crossbar hasn't been used up to this point.) So after a dozen or so experimental vaults, put the bar up to about 4 feet or have it held at that height. This is ridiculously low but purposely so, in order that the beginner can clear it easily and thus be encouraged. Following several successful attempts, raise the bar 6 inches to a foot at a time.

The "swing" at this point will probably be no more than a lifting of the feet not even handgrip high. But learning to swing properly takes considerable time and more specific attention can be given to it in later lessons.

This ends the first lesson.

ENCOURAGE ANY SUCCESS

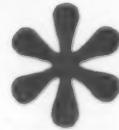
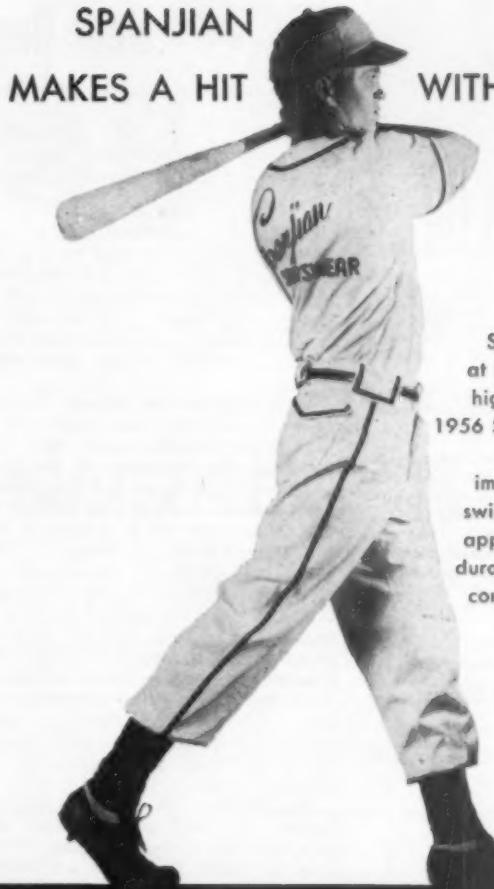
Some become proficient at the preliminaries quickly, while others take more time. But if anyone can get off the ground the first day, he has made a fair start and he should be told so. The coach should encourage any degree of success while reminding his proteges that good vaulting form comes gradually after much intelligent practice. A few may be disheartened, but the novelty will ordinarily stimulate most beginners to keep trying.

It should be noted that some essentials ultimately necessary for successful pole vaulting have not been included in the first lesson. For example, a properly regulated run and details of precise take-off technique have not yet been introduced.

The run should eventually be lengthened to 100-140 feet and so regulated that the vaulter will consistently hit his take-off mark correctly. The take-off foot should land directly under the right hand, and both hands should be directly above the head, with elbows bent, at the take-off.

Nor has anything as yet been taught concerning the delayed swing and pull, the roll-back, the push-up, or the arched clearance. Each of these elements is to be introduced gradually after the beginner has become competent at clearing the bar with the simplified style already described and is ready for more advanced technique.

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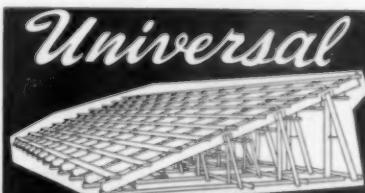


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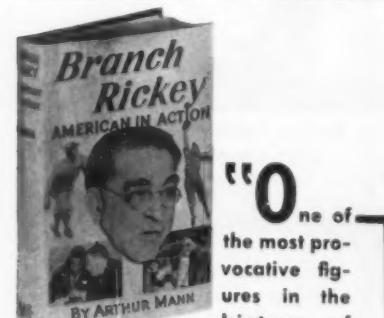
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New Books on the Sport Shelf

- **SUCCESSFUL MULTIPLE OFFENSE IN HIGH SCHOOL FOOTBALL.** By Robert E. Walker. Pp. 228. Illustrated—diagrams. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

WITH multiple offense riding a new wave of popularity, this book is particularly timely. Written by the keenly astute coach of Brookville (Pa.) H. S., it explains precisely how to adapt the power, speed, and deception of the multiple offense to any high school team.

More specifically, Coach Walker's offense combines the power of the post/pivot (double-team) and trap-blocking characteristic of the single wing with the speed and deception of the T. What emerges is an offense that can strike from the T, Winged T, Double-Winged T, Single Wing, and Double Wing—using an unbalanced line right with split ends and/or flankers.

That's a mighty potent hunk of offense, and Coach Walker tells you exactly how to put it together. Very graphically, step by step, he explains how to select your personnel, the basic formations, organization (numbering holes, starting count, huddle, etc.), and the development of the running attack.

In individual chapters, he fully describes the play series at each hole, covering the following holes—5, 3, 1, 2, 4, 6, and 8. He shows you how to run 82 plays with only eight basic blocking assignments for the line!

He then delves into the development of a passing attack, strategies for the kicking game, drills, defending the multiple offense, and the future of the multiple offense.

This very definitely is a sound, practical, highly authoritative text for the football coach.

- **BRANCH RICKEY (American in Action).** By Arthur Mann. Boston: Houghton Mifflin Co. \$4.

ONE of the most provocative figures in the history of sports, Branch Rickey has been a headline maker for more than 40 years. Former college coach, big league manager, and super executive, his contributions to organized baseball are truly staggering. In fact, he probably has influenced the game—physically and sociologically—more than any single figure in diamond annals.

Among his more monumental contributions are the development of the farm system, the breaking of the "color line," the perfection of protective helmets, and a vast number of new concepts in technique and strategy.

A dynamo of physical and mental energy, Rickey always has been a most exciting and controversial figure, and

the story of his life makes absolutely fascinating reading—particularly as delivered by his lifetime buddy and former right-hand Mann.

Behind this book lie years of the most painstaking research. And as the author states in an acknowledgment, "A writer who can discard 75% of his endless gleanings has the blessed assurance of little overlooked."

The book bounces with wonderful inside stories, humorous anecdotes, and fresh slants on some of the most historic episodes in baseball history. Simply and beautifully written, it's the kind of book that, once opened, simply can't be put down.

- **STAGING SUCCESSFUL TOURNAMENTS.** By E. Douglas Boyden and Roger G. Burton. Pp. 171. New York: Association Press. \$4.75.

WITH so many types of tournaments being conducted at all skill levels, schoolmen have felt an acute need for a practical manual of explanations and draw sheets.

This big (11 by 8½ inch), beautifully put-together book meets that need in an overwhelmingly practical manner. It tells you exactly how to select, plan, conduct, and evaluate all kinds of sports tournaments.

The first section covers types and selection of tournaments: extended tournaments, round-robin tournaments, elimination-type tournaments, consolation tournament, and double-elimination tournament among others, as well as the planning and conducting of tournaments.

The second section offers 114 full-page single and double elimination draw sheets for 3 to 40 teams, all of which are removable for immediate use!

No matter what your tournament need may be—no matter what the sport or skill level—this book will tell you precisely how to organize it in no seconds flat!

This is easily the most comprehensive collection of practical tournament methods ever put together in a single volume.

- **MODERN MIDDLE AND LONG DISTANCE RUNNING.** By Jim Peters, Johnny Johnston, and Joseph Edmundson. Pp. 152. Illustrated. New York: Sport Shelf. \$4.50.

LOADED with down-to-earth advice, this book offers the most modern training methods and specimen schedules for both the beginner and the champion.

It contains guidance on clothing, footwear, diet, and tactics along with detailed information on the programs followed by John Landy, Jim Peters,

and Frank Sando as well as statistics on the world's best over the past 20 years.

Other sections deal with exercises, including Fartlek training, the development of speed and stamina, handicap running, staleness, the effect of training on the heart, and many other topics essential to a complete understanding of the subject.

American distributor of the book is Sportshelf, 10 Overlook Terrace, New York 33, N. Y.

- INTRAMURAL HANDBOOK. Pp. 24. St. Louis: Rawlings Sporting Goods Co. Free.

PHYSICAL educators and recreation directors can derive an enormous amount of practical material from this attractive 24-page book.

It contains complete field and court diagrams, detailed instructions on how to run a tournament and arrange a schedule, complete pairings for round-robin schedules for 4-team to 18-team leagues, sources of rules and information, and a table enabling you to calculate won-lost averages in a split-second.

For your free copy, check the "Rawlings" listing in the master coupon on page 48.

Miscellaneous

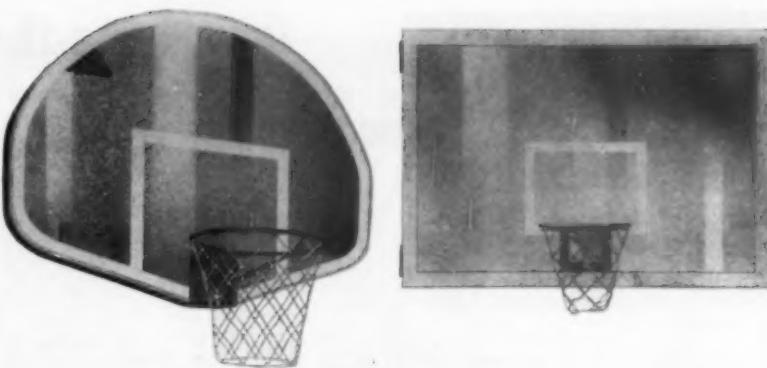
- 1957 Converse Basketball Year Book. Pp. 52. Illustrated. Malden, Mass.: Converse Rubber Co. Free. (A marvelously attractive and absorbing record—high school, college, and pro—of the 1956-57 season, replete with complete reviews of every conference and tournament, state high school champions, All-American teams, scoring leaders, plus many other interesting features including team pictures and articles by outstanding coaches. If you haven't received your free copy, write to Converse Rubber Co. at Malden, Mass.)

- American Tennis. By Parke Cummings. Illustrated. Boston: Little, Brown & Co. \$6. (A big handsome "biography" of the game and its outstanding figures—a must for every tennis coach and fan.)

- Fun in the Rough. Edited by Howard Gill. Pp. 118. Illustrated—cartoons. New York: Prentice-Hall, Inc. \$2.95. (A rollicking collection of funny golf cartoons and sketches.)

- 1958 Official NCAA Sports Guides: Swimming, Wrestling, Ice Hockey. \$1 each. (Order from The National Collegiate Athletic Bureau, Box 757, Grand Central Station, New York 17, N. Y.)

- The Science of Skin and Scuba Diving. Developed by Conference for National Cooperation in Aquatics. Pp. 306. Illustrated. New York: Association Press. \$3.95. (Absolutely everything the diver needs to know about water skills and waternanship to insure safe, scientific diving.)



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Developing the Quarter-Miler

(Continued from page 20)

big, strong, good speed, with a natural ability to relax. His 49.5 as a sophomore leaves us tingling with anticipation and speculation as to his potential. He should certainly approach 48 next year, along with Allums, and as a senior the next year . . . ?

Our specific conditioning of the Q. M. is paced 220s and 330s. On any given day, we'll do either two or three 220s at 22.5-23.0 for potential 49 flat men—5 slower for 50 flat men, and so on; or one 330 at 36 flat or better for potential 49 flat men—1.0 slower for 50 flat, and so on.

On the 220 day, we like as little rest between as possible and leave it more or less up to the boy, time of year, etc. One 440 walked in 5 minutes would be ideal. Since we'd rather have quality than quantity of work, we don't push for the third 220 unless the boy looks and feels good.

On the 330 day, we'd like to get one or two 220s at race pace after the 330. However, except toward the middle and end of the season or after a day's rest, it's hard to get more than one. If the first 220 is poor with good effort, we don't even try for the second.

These types of work-outs are alternated to relieve the monotony. They give the boy so much experience at running the first part of his race that it becomes habit to run at a certain pace. This is particularly important when we start to run in lanes and must run our own race for at least the first 220 or 330.

We feel this is at least as important as the conditioning factor, especially in the 440 where speed is so important and where the last 25 yards can be oh, so long when the race is run incorrectly. It's not so much a matter of conditioning the boy to attain his race potential (though this is important, of course) as it is a matter of getting the boy to run the race he's capable of (or occasionally even one he's not capable of).

One other thing in Q. M. training that's very important is preparation for competition. Since we don't usually know too early what position or lane the boy will have, some of his practice therefore should be from different lanes with teammates in adjacent lanes going at different rates of speed to try to

make our Q. M. break his pace.

We believe that the only fair way to run a quarter is in lanes—preventing a quick start and loafing the turns. Since this is the way the race will be run in the big meets, we do it this way in our home dual meets. Inasmuch as we don't have a 220-straightaway, we start the race at the finish end of our straightaway, run the first turn in lanes, and then break. There's then a 110-yard fight for the pole around the last turn and 110 yards to the finish.

I would rank the 440 along with the pole vault and high hurdles as the three events in which participants must really want to compete in order to do a good job. Our task is then clear: find boys who like to run and interest them in the quarter; estimate their potential and have them run as much of the race as often as possible without unpleasant physical or emotional consequences; and have them compete often with boys of about the same or slightly better ability. An improving Q. M. will be the result.

Baseball Drills

(Continued from page 16)

CROSS-OVER DRILL: We use this drill only during the first few weeks of the season for establishing the habit of the cross-over step and to help early-season conditioning. Approximately 3 or 4 players are stationed on the base line between each base. The coach stands on the mound and, while watching one player, blows his whistle.

All players make their break to the right, round the next base (trying to hit it with their left foot), and coast to a stop when they hear the second whistle. The coach then repeats the procedure while watching a different individual execute the cross-over step—correcting mistakes as the drill progresses.

2 - & - 1 BATTING PRACTICE: This is an extremely practical drill for teaching fundamentals in a short amount of time. It speeds up batting practice, keeps interest because of game conditions, and gives practice in all phases of the game. We've found that we can give the entire squad a chance to bat two or three times by using this drill.

How the drill is run: Four or five players wait to bat, each coming to the plate with a count of 2 balls and 1 strike on him. The catcher

calls the balls and strikes and game conditions are used throughout the drill. A few extra outfielders may be put in the outfield without affecting the drill too much.

A player stays at bat until he makes an out, and players are called in by the coach to replace the player who makes the out. It's something like "work-ups", but players do not have to play all positions nor do you lose time by having all players change positions after each out.

Advanced Fencing

(Continued from page 24)

Schoolboys quickly become adept with the rope and are soon performing "doubles" and "cross-overs" and trying to outdo each other in rope manipulations. It's quite easy to show the relationship between the quick leg movements in skipping and the action of actual competition in combat. As a result, confidence in their ability to last through a closely contested, drawn-out bout is gained.

That the above techniques are attainable by interscholastic fencers is attested by the high level of schoolboy fencing in the metropolitan areas of New York and Philadelphia, to name but two competitive centers.



FIG. 8, Rope Skipping: Squad or class formation showing conditioning activity.

The mystery formerly attached to the sport is slowly but surely being broken down, and when it becomes known that fine athletes, off-season from football, soccer, baseball, and track, are profiting from the training in precision movement and agility gained in this sport, its growth in popularity should follow.

The fact that it gives the competitor an activity which can be readily and inexpensively pursued in a recreational manner in later life should argue for its inclusion in the program of every good athletic conference.

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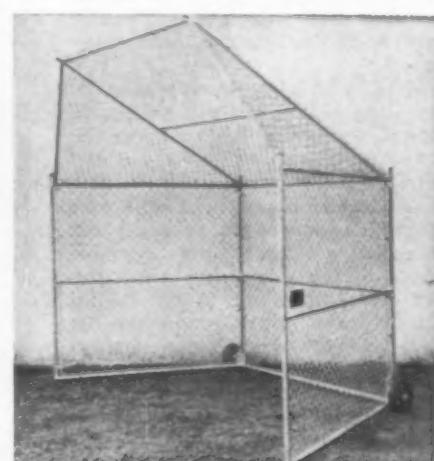
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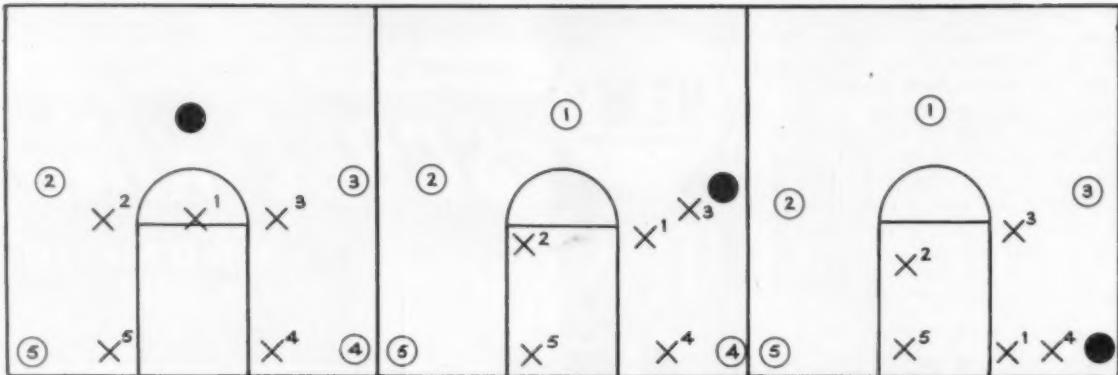
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DIAG. 4, A 3-2 ZONE: When ball is up front (left), X-1 plays middle. He then slides into every spot vacated by a teammate. When side man gets ball (center), he's played

aggressively by X-3, with X-1 sliding into the vacated zone. When ball goes into the corner (right), X-4 shifts over to the corner and X-1 slides into the vacated area.

A Multiple Team Defense

(Continued from page 11)

(6) Can he take it under the basket?

Rule No. 1 is always keep between the man and the basket. Rule No. 2 is never turn your head away from the man. An alert opponent will then instantly cut for the basket for an easy goal.

The guard must box out on all shots, then rebound. He must be ready to switch at all times, especially if he's the rear man in a positive block. He must fight his way through all screens.

When involved in a two-on-one situation, he must fake toward the ball and stay in the basket area—forcing the shot from as far out as possible. We discourage "divers," "leapers," "ball hawks," and "laggers."

A "diver" is continually bent on trying to steal passes, but continually guesses wrong. A good offensive faker constantly embarrasses this type of player.

A "leaper" plays about eight feet from his opponent and takes off like a rocket whenever his opponent starts taking a set shot—with the result that his man is always faking the shot and going around him for easy lay-ups—a prospect that plays hob with the overall defense.

A "ball hawk" worships the ball. Without it, he's completely lost. So he keeps going for it, thus continually weakening the structure of the team defense.

A "lagger" is constantly coming back slowly on defense. The opponents scout him and the fast break runs wild. He's always a fall guy

for running dummy passes.

We urge our boys to play aggressively but not to keep hitting their men. In winning both the Glens Falls and National Catholic H. S. tournaments last season, we were awarded trophies for committing the least number of fouls. Statistics for our 24 games revealed that we committed an average of 10.4 fouls per game to our opponents' 14, and that we lost only three men on fouls during the entire season!

We also instruct our boys to play as safe as possible. We don't gamble defensively. Even on jump balls, two men play safe, while the other two attempt to get the tap.

When we're shooting foul shots,

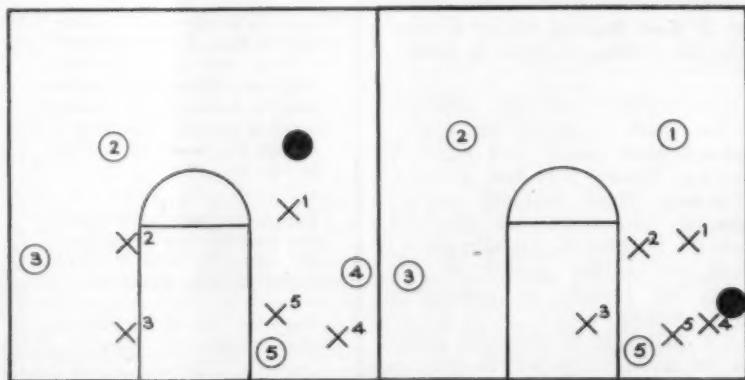
two men play back to prevent a fast break after the try.

On outside balls under the defensive goal, we don't swarm all over the outside man but have the guard playing him back a yard or two half-facing the court to pick up any free opponent coming in.

From the boy's freshman year on through graduation, the principles of the old Visitations' man-to-man defense are constantly hammered home until they become instinctive habit patterns. We then proceed to combine the man-to-man defense with zone principles to discourage cutting and encourage long-range shooting.

We keep emphasizing the importance of *never relaxing on defense*. If the boy needs a breather, he should come out or wait until his team goes on offense.

When the game is over, we like our players to think in this fashion:



DIAG. 5, A 2-3 ZONE: With ball at right up-court, X-1 plays ball while X-2 falls back, X-5 blocks post, and X-4 readies for pass to side man. When ball goes to side (right), X-4 moves up to play it, while X-1 and X-2 float back and X-5 blocks post. This is good defense against team with poor side shots.

"Boy, what a great defensive job Tom did on their center!", NOT: "I wonder how many point I scored?"

Players must take pride in both their defensive ability and the team defense as a whole. Otherwise they're not going to wear the Terrier uniform very long.

FRESHMEN DEVELOPMENT

Since we believe that "coming events cast their shadows before," we really work on our first-year boys. "Habit is second nature," some sage once said, and the vital thing in education is to make the nervous system our ally instead of enemy. We should guard against growing into ways likely to be disadvantageous to us. We should adopt only the ways that someday will bear fruit.

Our freshmen, accordingly, are thoroughly schooled on the solid man-to-man defensive principles. Later these principles are expanded to meet the requirements of the modern game—clogging the middle and playing a combination of half zone and half man-to-man defense. The frosh are given the same variety of defenses they'll be required to play on the varsity.

We have them first play one-against-one, observing and correcting their stance, footwork, and blocking of the offensive man. We then play two-against-two, observing and correcting their switching. We don't want them to over-switch and insist on their fighting their way through half-blocks.

Next comes three-against-three, following the same procedure to illustrate that the individual defensive man is only as good as his defensive teammates allow him to be.

Constant talking is a must, and the guard's hands must be in back of him as he rotates around the court—enabling him to sense blocks and yell "Switch!"

Whenever a freshman makes an elementary defensive mistake, the whistle blows, play ceases instantly, and the erring youngster stands absolutely still while the correction is made.

Defense is tough. True. There's no easy way of teaching individual and team defense. The coach must sweat, the players must sweat, the same boring principals must be repeated again and again until they become automatic habit patterns.

We constantly revise, review, and repeat until the technique becomes instinctive. We don't want any indecision, no faint-heartedness. "A positive block necessitates a positive switch."

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Effect of Weight on Leg Strength and Vertical Jump

IT'S the writers' hypothesis that a systematized weight training program will increase an athlete's leg strength and vertical jump. And it was with this thought in mind that they launched a study to determine and evaluate the results of a systematic weight training program on leg strength and vertical jump.

Forty basketball candidates from the Springfield College freshman squad were used as subjects. These subjects were equated into two groups, using scores obtained from the Roger's Physical Fitness Index test.

Group A consisted of 20 subjects involved in the weight training program, while Group B consisted of 20 subjects who, to the knowledge of the writers, were not involved in any form of systematic weight training.

Both groups were exposed to the skills and techniques required in the undergraduate professional preparation curriculum of physical education. Also, several of the subjects were involved in the freshman athletic program.

Two subjects—one from each group—dropped from the study due to lack of interest. But these dropouts did not appreciably change the status of the two groups.

Group A participated in the weight training program three days a week—Monday, Wednesday, and Friday—for a period of five weeks. They performed the one exercise of heel raising. This was executed by placing the balls of the feet on the edge of a two-inch board secured to a platform. The barbell was lowered on the subject's shoulders, and he then performed two sets of ten repetitions and a third set of as many repetitions as possible. A one-minute rest was required between each set.

The initial amount of weight to be lifted on the first day was determined by adding the two scores, right and left foot, achieved on the ankle plantar flexion test. The amount of weight each subject lifted after the first day was determined by

the following rules: (1) five pounds were added to the previous weight lifted each day of the weight training program, (2) for each repetition over ten achieved on the third set, one pound was added.

Group A was tested prior to and every Friday of the weight training program.

Group B was tested prior to and at the conclusion of the weight training program.

The experimental method was used in pursuing this research. Measuring tests were the Sargent Jump, the leg-lift strength test, and the ankle plantar flexion strength test.

Vertical jump was measured by the chalk variation of the Sargent Jump. The subjects made two chalk marks on a graduated board—one with arms fully extended and the other at the height of the jump. In this jump, the individual swung his arms downward and backward, taking a crouch position, with knees bent to right angles. The subject paused in this position to eliminate a double jump, and leaped upward swinging the arms forward and upward.

MARKS BOARD AT TOP OF JUMP

At the highest point of the jump, he swung his outside arm downward and backward, and marked the board with his inside hand. The distance between the two marks was recorded in inches. Chalked fingers were used to mark the board.

The contracted strength of the knee extensor muscles was measured by administering the leg-lift strength test on a back and leg dynamometer. The belt method was used. The dynamometer was mounted on a small wooden platform on which the subject stood holding a cross-bar (with both palms down) at the junction of the thighs and trunk. A tightly woven canvas belt looped each end of the cross-bar, holding it securely against the body of the subject.

A heavy chain fastened from the dynamometer to the cross-bar posi-

Training

tioned the subject's knees between 115 and 120 degrees. Extension of the knees produced desired dynamometer readings. Emphasis was focused on straight arms and back, head up, chest out, and over-extension of the knees.

The strength of the musculature which produced plantar flexion of the ankle was measured by an ankle plantar flexion test. The sitting variation of this test was used. The subject assumed a sitting position on a table, legs hanging, thigh adducted at the hip joint at 180 degrees, knees in 90 degree flexion, and ankle in 90 degree plantar flexion.

A cable attached to the ceiling and to the subject's foot by means of a canvas loop was used. The canvas loop was looped around the foot at the phalangeal joints. The subject then exerted pressure by flexing the ankle in a vertical plane. A cable tensiometer was used to record the reading in pounds.

To determine the statistical reliability and significance of the difference in leg strength and the vertical jump of Groups A and B, the difference between means, the standard error of the difference, and the *t* ratio were computed.

To be statistically significant, the *t* for 19 subjects must be 2.88 and 2.10 at the .01 and .05 levels of confidence, respectively. The limits of *t* for Group B were the same as for Group A, with the exception of the leg lift which for 18 subjects needed to be 2.90 and 2.11 to be statistically significant at the .01 and .05 levels.

The experimental data of this study consisted of recorded vertical jump in inches and muscular strength in pounds.

The Sargent Jump of the weight training group showed an increase of 2.9 inches, while the controlled group showed an increase of .6 inch. The 2.9 inch increase showed a *t* of 8.7, which is significant beyond the .01 level of confidence. The increase of .6 inch gives a *t* of 1.9 which shows no significance at the .05 level.

The leg lift of the weight training group showed an increase of 161 pounds, while the controlled group showed a decrease of 70.4 pounds. The increase of 161 pounds gives a *t* of 5.1 which is significant beyond the .01 level, and the decrease of

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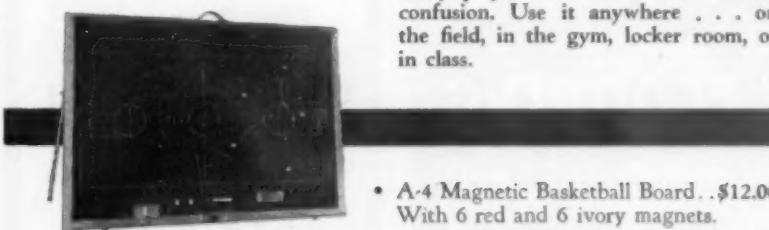
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70.4 gives a t of 1.35 which is not statistically significant at the .05 level.

The left ankle plantar flexion test showed an increase for both groups. The weight training group increased 25.4 pounds, which gives a significant t of 6.2. The controlled group increase was 6.8 pounds and a t of 2.9 which is also significant beyond the .01 level. However, it should be noted that the increase of Group A was 3.3 times as great as the B Group.

Both groups showed an increase in the right ankle plantar flexion test. The increase of the weight training group was 22.8 pounds, which gives a t of 6.2 which is significant beyond the .01 level. The increase of the controlled group was 3.1 pounds which gives a t of 1.7 and has no statistical significance at the .05 level.

The following limitations must be taken into consideration when interpreting the results of this study:

1. No control was exercised over the sleep, diet, and daily living habits of the subjects.

2. The length of the weight training program was limited to five weeks.

3. Measurement of data was confined to the Sargent Jump, the leg lift strength test, and the ankle plantar flexion strength test.

4. Previous experience of the students with testing procedures was not considered.

5. No consideration was given to the length of the foot in relationship to the two-inch heel raising board.

6. This study doesn't take into consideration the effect of endurance.

7. The number of freshman subjects used in this study was limited to 40.

8. Previous experience of the subjects in the area of weight training wasn't taken into consideration.

9. Individual body builds were not taken into consideration.

CONCLUSIONS:

A weight training program of five weeks using only the heel raising exercise, will increase leg strength, ankle plantar flexion, and the vertical jump. This should prove beneficial to participants in football, soccer, basketball, wrestling, swimming, track and field, baseball, and tennis. The writers believe that in all of these sports, leg strength, ankle plantar flexion strength, and vertical jumping ability play a predominant part in individual performances.

Coaches and trainers should give some thought to the possibility of a short weight training program being more beneficial than a longer exer-

cising program in pre-season training.

It's assumed that teams spend a great deal of time on a calisthenic program in pre-season to increase their strength and endurance. The writers feel that a weight training program will give a team more strength and endurance in a shorter period of time than a calisthenics program. The time saved can be used effectively for the teaching of individual team play.

It is recommended that some thought be given to the following problems:

1. A weight training program that should be carried on for a longer period of time. At the conclusion of this weight training program, there will be evidence of a steady increase in the leg strength, vertical jump, and the ankle plantar flexion strength.

2. A control group should be tested every week. This would give both groups the same advantages in testing, thus equalizing any learning factor which may be involved.

3. Measure both leg strength and the vertical jump, using two weight training groups, one building endurance and the other building strength. This study would determine which method of weight training is more beneficial.

4. Study the PFI of the subjects prior to and at the conclusion of the program to determine the amount of physical fitness gained or lost during the program.

5. Group research should be applied to weight training studies for better procedure and administration of tests.

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—National Federation

"Here Below"

(Continued from page 5)

shriek, waving their Little League pennants while shoving their capital-gains schemes behind Old Glory in the corner.

Take the westward gold rush of the Giants and Dodgers. Actually, there was nothing heinous about this get-rich-quicker scheme. Sure, the clubs were making dough in New York. But what's the crime about moving your factory to a better location? It's being done all the time. It's darn good business.

What was tough to stomach, however, was the smokescreen behind which the transaction was conducted. While O'Malley and Stoneham were filling the New York ozone with stardust about civic pride, baseball's debt to the public, and the public's debt to baseball, they were talking cold-turkey in California—setting up their multi-million dollar deals.

And even after the shifts were *fais accompli* and the Dodgers and Giants were boarding the gravy train going west, baseball stayed in

there pitching moonshine. Witness this mimeographed handout from the National League office:

"The National League again has demonstrated it is a progressive organization. The transfer of the Giants and Dodgers means that two more great American municipalities are to have major league baseball without depriving another city of that privilege."

Happy "Ah Love Baseball" Chandler couldn't have said it any better. If we accept this bizarre document at face value, the National League office must measure progress by municipal giveaways, pie-in-the-Skiatron, and capital-gain windfalls.

Is baseball so frightened, so hide-bound, so immature that it can't conduct its business intelligently and openly without resorting to infantile duplicity?

When is baseball going to discover that "business" isn't a dirty word in America—that a candid public relations policy won't bring the Dept. of Interstate Commerce down on its head or scare the fans away.

By this time, everyone knows that baseball is a business and Ford Frick isn't Santa Claus.

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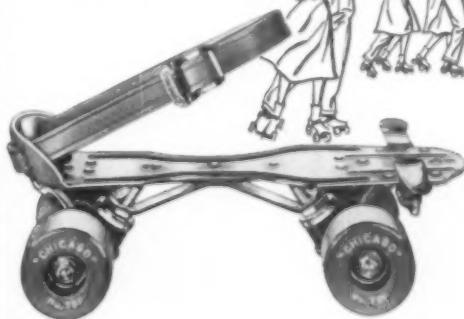
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